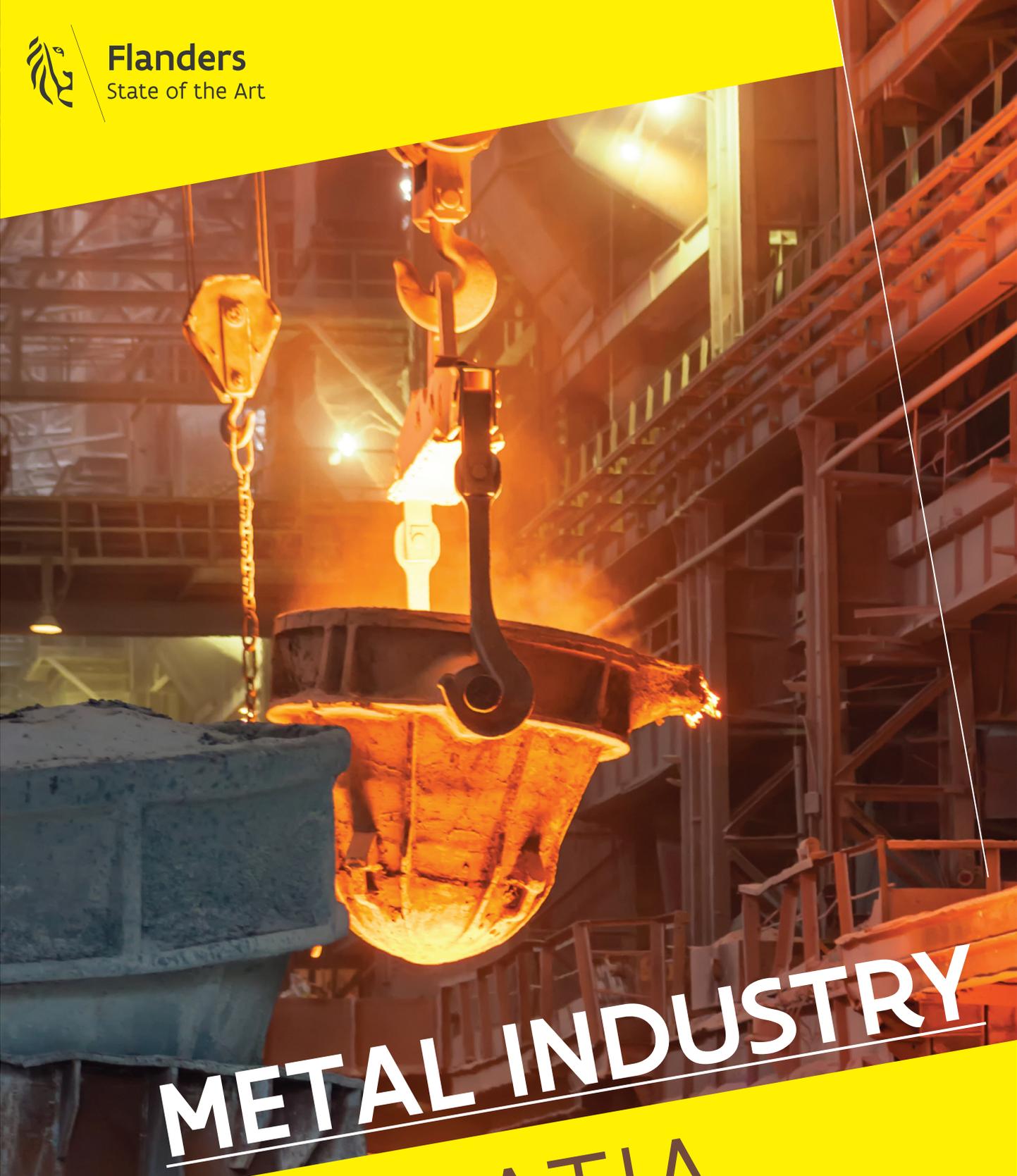




Flanders
State of the Art

A photograph of a metal casting process in an industrial setting. A large, glowing orange ladle is being lifted by a crane hook. The background shows a complex steel structure with multiple levels and walkways, illuminated by warm industrial lights. The overall atmosphere is one of intense heat and industrial activity.

METAL INDUSTRY IN CROATIA

FLANDERS INVESTMENT & TRADE MARKET SURVEY



FLANDERS
INVESTMENT &
TRADE



Metal Industry

Alexandre Loncke & Etienne Gicquel,
Amended by Antonija Hajman & Tim Ostyn

May 2015

Belgian Trade Office
Belgian Embassy
Pantovcak 125b1
HR – 10000 Zagreb (Croatia)

office@beltrade-croatia.com

T: +385 1 457 74 44

F: +385 1 457 74 45

Table of contents

| | |
|--|-----------|
| INTRODUCTION..... | 3 |
| OVERVIEW OF CROATIA..... | 3 |
| <i>General overview of Croatia.....</i> | <i>3</i> |
| <i>Economy.....</i> | <i>3</i> |
| <i>Overview of the Metal Industry.....</i> | <i>4</i> |
| TRENDS IN RAW MATERIALS..... | 7 |
| <i>Overview.....</i> | <i>7</i> |
| <i>Basic statistics of the Croatian metal manufacturing industry up to 2013.....</i> | <i>8</i> |
| <i>About aluminium.....</i> | <i>8</i> |
| <i>About Iron & Steel.....</i> | <i>9</i> |
| METAL INDUSTRY | 9 |
| <i>Overview of the metal sector.....</i> | <i>9</i> |
| <i>Labour force.....</i> | <i>10</i> |
| <i>Change in number of persons in paid employment.....</i> | <i>13</i> |
| <i>Employment in different activities 2015:.....</i> | <i>15</i> |
| <i>Fairs related to the metal industry.....</i> | <i>15</i> |
| INSTITUTIONS | 17 |
| <i>Faculty of metallurgy (Sisak).....</i> | <i>17</i> |
| <i>Institutional profile.....</i> | <i>17</i> |
| <i>Programme emphasis.....</i> | <i>17</i> |
| <i>Career prospects.....</i> | <i>17</i> |
| <i>Research orientation.....</i> | <i>17</i> |
| <i>Contact:.....</i> | <i>18</i> |
| <i>Croatian Foundry Association (since 1953).....</i> | <i>18</i> |
| <i>Aims of the association:.....</i> | <i>18</i> |
| <i>Members of the Croatian Foundry Association.....</i> | <i>18</i> |
| <i>Association of production of metal and metal products.....</i> | <i>19</i> |
| <i>About the association.....</i> | <i>19</i> |

Introduction

Croatia has been the newest member of the EU since July 1st, 2013. With its capital Zagreb, it is one of the most dynamic countries of ex-Yugoslavia. By opening negotiations with Croatia, the European Union recognized the development of democracy in the country and Croatia's constructive contribution in extending this process throughout Southeast Europe. Overall political and economic stability, an effective legal system and free enterprise in a democratic environment are the essential prerequisites for economic development, which have opened for Croatia the door to full EU membership.

Croatia's main manufacturing industries include chemicals and plastics, machine tools, fabricated metal products, electronics, pig iron and rolled steel products, aluminium processing, paper and wood products (including furniture), building materials (including cement), textiles, shipbuilding, petroleum and petroleum refining, food processing and beverages.

In this report, you will firstly discover a general overview of Croatia with some key information that will give you an idea of the potential market in Croatia. Then, you will find some useful information about raw materials produced in Croatia, which are predominantly aluminium and steel. Finally you will find an overview of trade fairs related to the sector and information on relevant associations and the Faculty of Metallurgy.

Overview of Croatia

General overview of Croatia

| | |
|---|---|
| AREA | 56,594 sq. km (22,830 sq. mi) |
| POPULATION | 4,3 million |
| CAPITAL CITY | Zagreb |
| POPULATION IN ZAGREB | 790.000 inhabitants |
| LANGUAGE | Croatian |
| CURRENCY | Croatian Kuna (HRK) |
| GOVERNMENT | Parliamentary Democracy |
| MEMBERSHIP OF INTERNATIONAL ORGANIZATIONS | <ul style="list-style-type: none">• United Nations• Council of Europe• Regional Cooperation council• International Monetary Fund• World Bank• World trade Organization• European Bank for Reconstruction and Development• Partnership for Peace• NATO |

Economy

| | |
|------------------------------------|-------------|
| GDP | 53.76 Bn € |
| GDP per capita | 10.249 € |
| Average monthly salary (gross) | 1.049 € |
| Average monthly salary (Net) | 728 € |
| Annual growth | -0.9% |
| Inflation | -0.2% |
| Unemployment | 21% |
| Exports per capita | 2.104 |
| Imports per capita | 3.703 |
| Exchange rate Euro/Kuna 21/04/2015 | 1€ = 7.5 Kn |

Source: www.dzs.hr

The Croatian economy was badly affected by the global financial crisis, and contracted by 6.9% in 2009, 1.4% in 2010, then showed signs of recovery in 2011, but contracted again in 2012 by 1.8%. Before the global financial crisis of 2008-09, the Croatian economy grew at a healthy 4-5% annually, incomes doubled, and economic and social opportunities dramatically improved.

Today, the situation is much better than the previous years. Unemployment is dropping and GDP is slowly rising. In the last quarter of 2014, the GDP rose with 0.3% and the inflation amounted to 0.1%.

With annual exports of over €1 billion, the industrial sector is dominated by shipbuilding, which accounts for over 10% of exported goods. Food processing and chemical industry also account for significant portions of industrial output and exports. The industrial sector is responsible for 25% of Croatia's GDP, with agriculture, forestry and fishing accounting for the remaining 5% of Croatian GDP.

In tables 1 and 2 below, the top 5 countries and the top 5 products are shown regarding the imports and the exports in Croatia in 2014.

Table 1: Top 5 countries regarding import and export in Croatia

| Country | Export | Country | Export |
|----------------------|--------|----------|--------|
| Italy | 14% | Italy | 16% |
| Bosnia & Herzegovina | 11% | Germany | 13% |
| Germany | 9.7% | China | 7.4% |
| Slovenia | 8.3% | Slovenia | 5.8% |
| Austria | 6.9% | Russia | 5.5% |

Table 2: Top 5 products imported and exported

| Product | Exported | Product | Imported |
|-------------------------|----------|----------------------|----------|
| Refined petroleum | 10% | Crude Petroleum | 7.5% |
| Passenger & Cargo ships | 4.3% | Refined Petroleum | 6.3% |
| Packaged Medicaments | 4.1% | Packaged Medicaments | 3.1% |
| Electrical Transformers | 2.6% | Petroleum Gas | 2.8% |
| Petroleum Gas | 2.1% | Cars | 2.4% |

Source: <https://atlas.media.mit.edu/en/profile/country/hrv/>

Overview of the Metal Industry

The manufacturing of basic metals and fabricated metal goods has a long tradition in Croatia and it is one of the most important industries. The production of aluminium and its alloys started in 1937 in Šibenik while in 1950 the ironworks in Sisak started the production of seamless steel tubes and metal. The production development has been accompanied by the establishment of various institutions of higher education. The Faculty of Mechanical Engineering and Naval Architecture was founded in Zagreb in 1956 and four years later, in 1960, the Faculty of Metallurgy in Sisak was established.

Businesses dealing in the metal industry are focused on exports, introduction of new technologies, training of professional personnel, quality system certification, environmentally friendly production and connecting domestic and foreign producers. The production program of the metal industry in Croatia is very diverse and can meet the needs of potential customers and partners. Some of the major companies operating in Croatia are Alstom Hrvatska, Starco Beli Manastir and Metalind.

In Croatia, the metal industry is mostly developed in the counties of Medjimurje, Bjelovar-Bilogora, Brod-Posavina and Krapina-Zagorje.

- In Croatia more than 3,000 companies operate in the metal industry
- The average gross salary is € 1,151 (2014).
- The share of the metal industry in total exports is 3.5%.
- Approximately 10% of the total added value and sales of the manufacturing industry is realized in the metal industry.

However, over the past few years the production of steel in Croatia has experienced a decline. There was a decline in production of 29.6% while the world average is an increase of 0.1% compared to last year. World Steel Association has 65 member countries and makes up 98% of the world's steel production. The total amount of steel produced was 131 million tons of steel.

In Croatia the Krapina-Zagorje region is the leader in the production of metal. In 2012 revenues amounted to 116 million kuna and the employment rates are very high (9.7% higher than the Croatian average).



There are categories of how metals are grouped. These categories are mentioned below:

Manufacture of basic metals and fabricated metal products

- C 24 – Production of basic metals
- C 25 – Manufacture of fabricated metal products, excluding machinery and equipment

Manufacture of machinery and equipment, motor vehicles, trailers and semi-trailers

- C 28 – Manufacture of machinery and equipment
- C 29 – Manufacture of motor vehicles, trailers and semi-trailers
- C 30 – Manufacture of other vehicles (without NKD 30.1- Manufacture of ships)
- C 32 – Other manufacturing such as games and toys, jewellery, sports equipment and musical instruments.
- C 33 - Repair and installation of machinery and equipment.

In the following charts you can see the number of companies registered, as well as the amount of small (M), medium (S) and big (V) sized companies.

Table 3: Number of companies in Croatia related to metal

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| C24-metali | 107 | 105 | 106 | 109 | 105 | 107 |
| C25-met.proizvodi | 1540 | 1612 | 1746 | 1752 | 1726 | 1717 |
| C28-strojevi i uređaji | 570 | 538 | 579 | 562 | 558 | 578 |
| C29-motorna vozila | 80 | 73 | 84 | 79 | 78 | 83 |
| C30-ost.prijevozn. | 266 | 278 | 293 | 302 | 279 | 272 |
| C32-ostala prer.ind | 269 | 272 | 295 | 312 | 316 | 347 |
| C33-poprav.,instalir. | 556 | 476 | 532 | 572 | 593 | 670 |
| Σ | 3388 | 3354 | 3635 | 3688 | 3655 | 3774 |

Source: Croatian Chamber of Economy, Industry and Technology Department

Table 4: Number of small, medium and big companies in Croatia in the metal sector

| | 2011 | | | | 2012 | | | | 2013 | | | |
|-----|------|-----|----|------|------|-----|----|------|------|-----|----|------|
| | M | S | V | Σ | M | S | V | Σ | M | S | V | Σ |
| C24 | 94 | 10 | 5 | 109 | 86 | 9 | 4 | 105 | 90 | 12 | 5 | 107 |
| C25 | 1688 | 57 | 7 | 1752 | 1574 | 54 | 7 | 1726 | 1652 | 57 | 8 | 1717 |
| C28 | 532 | 28 | 2 | 562 | 513 | 27 | 2 | 558 | 546 | 29 | 3 | 578 |
| C29 | 73 | 3 | 3 | 79 | 68 | 3 | 3 | 78 | 79 | 1 | 3 | 83 |
| C30 | 287 | 9 | 6 | 302 | 250 | 9 | 7 | 279 | 260 | 8 | 4 | 272 |
| C32 | 309 | 3 | 0 | 312 | 291 | 3 | 0 | 316 | 344 | 3 | 0 | 347 |
| C33 | 559 | 11 | 2 | 572 | 533 | 1 | 1 | 593 | 659 | 10 | 1 | 670 |
| Σ | 3542 | 121 | 25 | 3688 | 3315 | 106 | 24 | 3655 | 3630 | 120 | 24 | 3774 |

Source: Croatian Chamber of Economy, Industry and Technology Department

Trends in raw materials

Overview

Croatia produced a limited number of mineral commodities; petroleum extraction and refining are the major economic activities of the mineral industry. Production of metals is limited to aluminium alloys and steel.

Production of the Croatian mineral industry (2009 - 2013)

TABLE 1
CROATIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

| Commodity | 2009 | 2010 | 2011 | 2012 | 2013 |
|--|-----------------------|---------------------|---------------------|-----------------------|---------------------|
| METALS | | | | | |
| Aluminum: | | | | | |
| Alloys | 24,738 [†] | 20,974 [†] | 36,988 [†] | 41,772 [†] | 33,692 |
| Semimanufactures [‡] | | | | | |
| Rolled | 50,000 | 50,000 | 60,000 | 69,924 ^{†,2} | 90,629 ² |
| Extruded | 6,000 | 6,000 | 8,000 | 8,000 | 8,000 |
| Total ³ | 56,000 | 56,000 | 68,000 | 77,900 [†] | 98,600 |
| Steel: | | | | | |
| Crude, from electric furnaces [‡] | 43,000 [†] | 95,000 | 96,000 [†] | 1,000 [†] | 28,000 |
| Semimanufactures, hot rolled [‡] | 51,583 ^{†,2} | 93,000 [†] | 100,000 | 1,000 [†] | 28,000 |

[†]Estimated; estimated data are rounded to no more than three significant digits. [‡]Revised. do. Ditto. -- Zero.

¹Table includes data available through August 1, 2014.

²Reported figure.

³Data may not add to totals shown because of independent rounding.

Source: USS; 2013 Minerals Yearbook CROATIA

Above, you can find the evolution of the aluminium and steel production from 2009 to 2013.

Basic statistics of the Croatian metal manufacturing industry up to 2013

Manufacturing of basic metals (2010=100)

| YEAR | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | Average |
|------|------|------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|---------|
| 2010 | 86.7 | 94.2 | 104.6 | 103.2 | 98 | 88.5 | 99.6 | 105.4 | 105.7 | 112.9 | 109.6 | 91.7 | 100.0 |
| 2011 | 80.5 | 91.8 | 114.3 | 110.9 | 114.1 | 99.7 | 106.2 | 93.1 | 95.3 | 101.8 | 104.2 | 66.2 | 98.2 |
| 2012 | 74 | 71.8 | 86.6 | 76.1 | 89.6 | 74.8 | 79.3 | 70.9 | 76.2 | 85.3 | 76.3 | 59.3 | 76.7 |
| 2013 | 69.4 | 84.4 | 101 | 103.9 | 93.9 | 88.3 | 103.6 | 63.1 | 91.2 | 91.9 | 94.2 | 78 | 88.6 |

Manufacture of fabricated metal products, except machinery and equipment (2010=100)

| YEAR | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | Average |
|------|------|-------|-------|-------|-------|------|-------|------|-------|-------|-------|-------|---------|
| 2010 | 80.6 | 100.9 | 109.6 | 106.1 | 106.7 | 94.5 | 99.1 | 93.1 | 109.1 | 100.1 | 103.8 | 96.5 | 100.0 |
| 2011 | 80.5 | 100.3 | 106.7 | 101.9 | 114.2 | 96.9 | 102.2 | 85.8 | 114.2 | 108.1 | 103.3 | 105.2 | 101.6 |
| 2012 | 77.3 | 69.9 | 85.8 | 105.8 | 125.6 | 99.5 | 112.2 | 98.9 | 106.8 | 106.5 | 111.1 | 106.1 | 100.5 |
| 2013 | 86.9 | 102.2 | 109.5 | 116.9 | 113.5 | 96.4 | 116.9 | 82.2 | 106 | 111 | 117.2 | 89.4 | 104.0 |

Source: Croatian bureau of statistics

About aluminium

The production of aluminium alloys has been changing in the past few years and in 2013 there has been a decrease of 23% compared to the previous year. When looking at semimanufactures, there has been a total increase of 20%.

TABLE 2
CROATIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

| Commodity | Major operating companies and major equity owners | Location of main facilities | Annual capacity |
|----------------------------|---|-----------------------------|-----------------|
| Aluminum, semimanufactures | TLM-TVP d.o.o. (Fintrust Holding GmbH, 100%) | Sibenik | 70 |
| Do. | TLM-TPP d.o.o. (Fintrust Holding GmbH, 100%) | do. | 10 |
| Do. | Top-Tvornica Olovni Proizvoda Aluminijskih d.d. | Sveta Nedjelja | NA |
| Do. | Ivanal d.o.o. | Sibenik | 3 |

The major operating companies for aluminium are TLM-TVP d.o.o. and TLM-TPP d.o.o. as well as Ivanal d.o.o. The three of them operate out of Sibenik, which are important to mention. There is also one in Sveta Nedjelja, not too far from Zagreb, called Top-Tvornica Olovni Proizvoda Aluminijskih d.d.

TLM-TVP was a niche producer of aluminum rolled products and TLM-TPP was a niche producer of aluminum extrusion products. Both companies were spun off in 2009 by their owner Fintrust Holding from the previously state-owned metal-producing conglomerate TLM-Tvornica Laki Metal, which had a long history of producing and processing aluminum products and was privatized in 2007. TLM-TPP produced standard tubes, bars, and profiles, and its aluminum extrusion plant in Sibenik has a capacity of 10,000 ton/year (Fintrust Holding GmbH, 2013).

[Ivonal d.o.o.](#) operates an aluminum die-casting plant in Šibenik whose capacity is 3,000 t/yr and employs 90 persons. The installed capacity includes 3,000 t/yr of hydrated alumina and 3,000 t/yr of aluminum. Ivonal's annual output varies between 1,200 and 2,000 t. The main consumers of its hydrated alumina include the automotive industry (60%), home appliance manufacturers (30%), and furniture makers (10%).

About Iron & Steel

The Croatian metal industry includes the manufacture of welded and seamless steel tubes, reinforcing steel, rolled bars, wire fabric, aluminium processing and metal castings. Many steel products, e.g. steel sheets, steel sections and similar, are not manufactured in Croatia, which is offset by imports.

With the newest data, there is only an estimation of the steel production and the data show a decline when compared to previous years. The decline has been significantly bigger than in the previous years. The major operating companies in Croatia for steel are ABS Sisak d.o.o. and Adria Steel d.o.o. in Split.

(Thousand metric tons unless otherwise specified)

| Commodity | Major operating companies and major equity owners | Location of main facilities | Annual capacity |
|--------------|---|-----------------------------|-----------------|
| Steel, crude | ABS Sisak d.o.o. (Danieli Group, 100%) | Plant at Sisak | 324 |
| Do. | Adria Steel Ltd. (Techcom GmbH, 100%) | Plant at Split | 50 ¹ |

ABS Sisak (formerly known as CMC Sisak d.d.) was acquired by the Danieli Group of Italy from Commercial Metals Co. (CMC) in 2012. ABS Sisak began production at the Sisak plant following the modernization and installation of new equipment in April 2014 (Brnić, 2014).

Adria Steel started testing a steel production unit at the Željezara Split d.d. steel works, which had been idle for 4 years. Adria Celik acquired Željezara Split in 2011. In July, the German group Techcom announced that it had become the sole owner of Adria Steel by acquiring the remaining 50% stake of the company from Croatia-based C.I.O.S. (Daskalovic, 2013c).

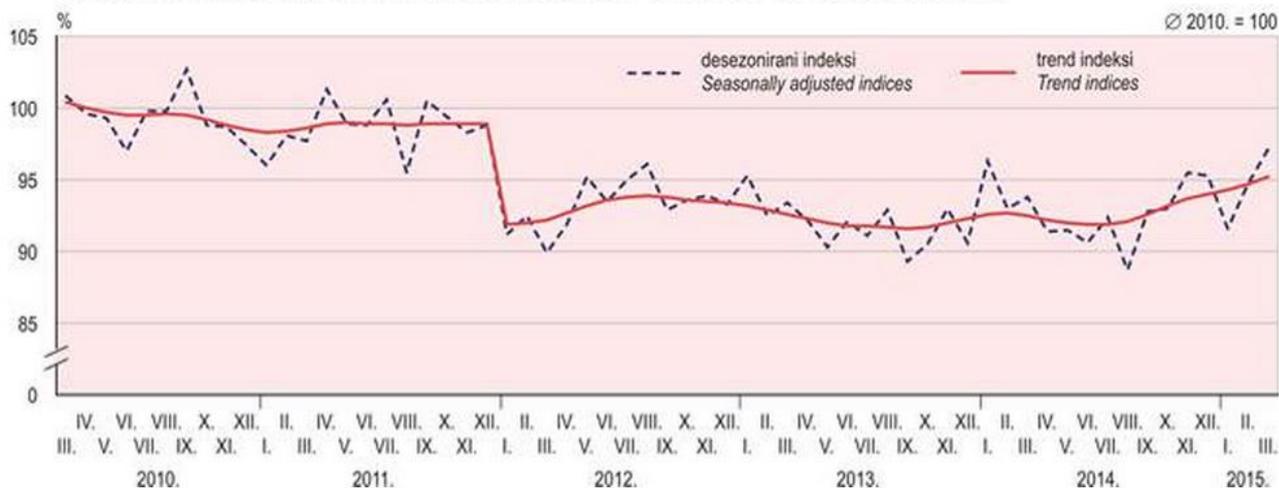
Metal industry

Overview of the metal sector

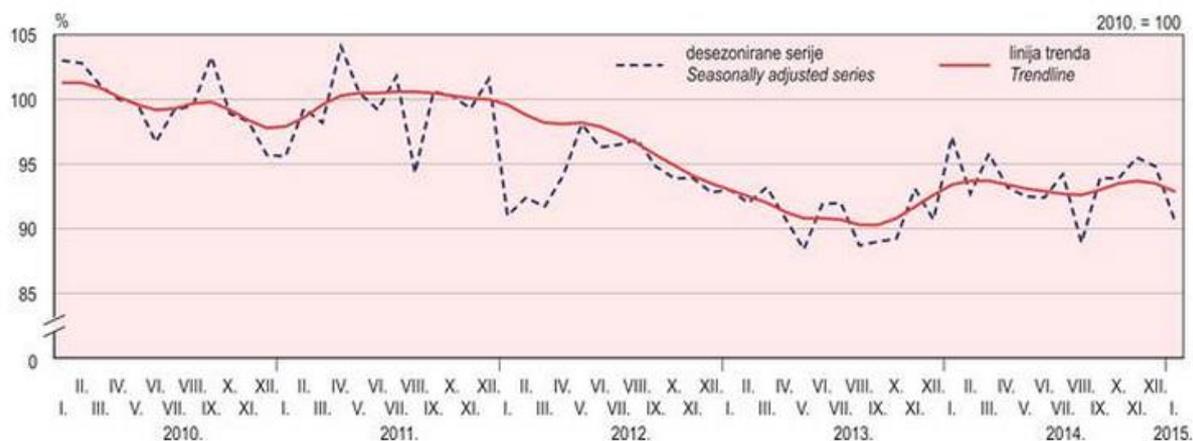
The manufacture of fabricated metal products and the metal processing activities can be divided into the manufacture of metal constructions, builder's carpentry of metal, containers, radiators, boilers, tools, packaging, bolt goods, furniture etc.

Major efforts are being made to increase competitiveness in international markets. To achieve a substantial output growth in the future, it is necessary to boost exports, penetrate new markets, introduce modern technology and launch new products, and also to connect with manufacturers of machinery and equipment both within the country and abroad. In the graphs below (source: www.dsz.hr) a 5 year time frame is visible of the industrial production volume indices and the manufacturing.

G-1. INDEKSI OBUJMA INDUSTRIJSKE PROIZVODNJE REPUBLIKE HRVATSKE, OŽUJAK 2010. – OŽUJAK 2015.
INDUSTRIAL PRODUCTION VOLUME INDICES OF REPUBLIC OF CROATIA, MARCH 2010 – MARCH 2015



G-2. INDEKSI OBUJMA PRERAĐIVAČKE INDUSTRIJE REPUBLIKE HRVATSKE, SIJEČANJ 2010. – SIJEČANJ 2015.
MANUFACTURING VOLUME INDICES OF REPUBLIC OF CROATIA, JANUARY 2010 – JANUARY 2015



Labour force

In March 2015 the unemployment level in Croatia dropped to 19,7% from 22% compared to the same period in 2014, meaning that there are around 330.000 unemployed people.

Table 5: Number of employed people in the metal sector in Croatia

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| C24 | 6857 | 6448 | 5676 | 5137 | 3885 | 4149 |
| C25 | 27219 | 25038 | 23996 | 23236 | 22877 | 23961 |
| C28 | 14248 | 12249 | 10606 | 10805 | 11232 | 10619 |
| C29 | 3652 | 1915 | 2138 | 2103 | 2115 | 2077 |
| C30 | 20295 | 14239 | 12269 | 12119 | 11245 | 10282 |
| C32 | | 1932 | 1880 | 2042 | 1968 | 2010 |
| C33 | | 8551 | 10651 | 10576 | 10326 | 9226 |
| Σ | 72271 | 70372 | 67216 | 66018 | 63648 | 62324 |

The table above shows how many people have been employed in each metal sector in Croatia from 2008 - 2013. There has been an increase in employment in the metal sectors C24, C25 and C32, where as for the other sectors there is a significant decrease. Overall the total employment in the metal industry is gradually falling.

Below are some more tables and information regarding the labour force in the metal sector of Croatia. The information is the most recent available. The source of the tables is the Croatian Bureau of Statistics (www.dsz.hr).

1. AKTIVNO STANOVNIŠTVO REPUBLIKE HRVATSKE PREMA ADMINISTRATIVNIM IZVORIMA I SPOLU
LABOUR FORCE OF REPUBLIC OF CROATIA, ACCORDING TO ADMINISTRATIVE SOURCES AND BY SEX

| | II. 2015. | | III. 2015. | | Indeksi <i>Indices</i> III. 2015. II. 2015. | | |
|---|------------------------|----------------------|------------------------|----------------------|--|----------------------|---|
| | ukupno <i>Total</i> | žene <i>Women</i> | ukupno <i>Total</i> | žene <i>Women</i> | ukupno <i>Total</i> | žene <i>Women</i> | |
| Aktivno stanovništvo | 1 625 419 | 778 033 | 1 620 387 | 775 433 | 99,7 | 99,7 | <i>Active population (labour force)</i> |
| Ukupno zaposleni | 1 295 668 | 602 343 | 1 301 176 | 604 362 | 100,4 | 100,3 | <i>Total persons in employment</i> |
| Zaposleni u pravnim osobama ¹⁾ | 1 091 824 | 515 180 | 1 095 401 | 516 552 | 100,3 | 100,3 | <i>Persons in paid employment in legal entities¹⁾</i> |
| Zaposleni u obrtu i slobodnim profesijama ²⁾ | 182 223 | 79 367 | 184 328 | 80 097 | 101,2 | 100,9 | <i>Persons in employment in crafts and trades and franchises²⁾</i> |
| Zaposleni osiguranici poljoprivrednici ²⁾ | 21 621 | 7 796 | 21 447 | 7 713 | 99,2 | 98,9 | <i>Employed insured persons – private farmers²⁾</i> |
| Nezaposleni ³⁾ | 329 751 | 175 690 | 319 211 | 171 071 | 96,8 | 97,4 | <i>Unemployed persons³⁾</i> |
| Stopa registrirane nezaposlenosti ⁴⁾ , % | 20,3 | 22,6 | 19,7 | 22,1 | | | <i>Registered unemployment rate⁴⁾, %</i> |

1) Statistička istraživanja RAD-1M i RAD-1G. Podaci za veljaču i ožujak 2015. privremeni su.

2) Podaci su preuzeti iz evidencije aktivnih osiguranika Hrvatskog zavoda za mirovinsko osiguranje.

3) Podaci su preuzeti od Hrvatskog zavoda za zapošljavanje.

4) Stopa nezaposlenosti izračunana je kao odnos nezaposlenih prema ukupnome aktivnom stanovništvu.

1) *Statistical surveys RAD-1M and RAD-1G. Data for February and March 2015 are provisional*

2) *Data were taken over from the records of active insured persons kept at the Croatian Institute for Pension Insurance.*

Change in number of persons in paid employment

2. INDEKSI KRETANJA BROJA ZAPOSLENIH U PRAVNIM OSOBAMA PREMA NKD-u 2007.¹⁾ I SPOLU U OŽUJKU 2015.

INDICES OF CHANGE IN NUMBER OF PERSONS IN PAID EMPLOYMENT IN LEGAL ENTITIES, ACCORDING TO NKD 2007.¹⁾

AND BY SEX, MARCH 2015

| | Broj zaposlenih u ožujku 2015. ²⁾ <i>Number of persons in paid employment, March 2015²⁾</i> | | Indeksi <i>Indices</i> | | | | | | |
|---|--|----------------------|---------------------------|----------------------|--------------------------|----------------------|------------------------------------|----------------------|---|
| | ukupno <i>Total</i> | žene <i>Women</i> | III. 2015. II. 2015. | | III. 2015. III. 2014. | | I. – III. 2015. I. – III. 2014. | | |
| | | | ukupno <i>Total</i> | žene <i>Women</i> | ukupno <i>Total</i> | žene <i>Women</i> | ukupno <i>Total</i> | žene <i>Women</i> | |
| Ukupno | 1 095 401 | 516 552 | 100,3 | 100,3 | 98,7 | 99,2 | 99,0 | 99,2 | <i>Total</i> |
| A Poljoprivreda, šumarstvo i ribarstvo | 21 949 | 5 968 | 100,9 | 100,8 | 94,7 | 98,0 | 96,0 | 99,5 | <i>A Agriculture, forestry and fishing</i> |
| B Rudarstvo i vađenje | 4 922 | 624 | 100,0 | 99,5 | 91,4 | 95,3 | 92,0 | 95,6 | <i>B Mining and quarrying</i> |
| C Prerađivačka industrija | 195 606 | 68 756 | 100,4 | 100,1 | 98,8 | 98,5 | 98,9 | 98,8 | <i>C Manufacturing</i> |
| D Opskrba električnom energijom, plinom, parom i klimatizacija | 14 568 | 3 118 | 99,9 | 100,0 | 98,7 | 100,2 | 99,4 | 100,8 | <i>D Electricity, gas, steam and air conditioning supply</i> |
| E Opskrba vodom; uklanjanje otpadnih voda, gospodarenje otpadom te djelatnosti sanacije okoliša | 20 457 | 4 015 | 100,0 | 100,0 | 97,7 | 99,1 | 97,8 | 99,3 | <i>E Water supply; sewerage, waste management and remediation activities</i> |
| F Građevinarstvo | 69 091 | 8 063 | 100,4 | 100,0 | 95,0 | 98,5 | 96,4 | 98,0 | <i>F Construction</i> |
| G Trgovina na veliko i na malo; popravak motornih vozila i motocikla | 173 867 | 92 566 | 99,7 | 99,6 | 98,4 | 98,3 | 99,3 | 98,9 | <i>G Wholesale and retail trade; repair of motor vehicles and motorcycles</i> |
| H Prijevoz i skladištenje | 56 113 | 13 578 | 99,8 | 100,0 | 96,8 | 96,6 | 96,5 | 96,2 | <i>H Transportation and storage</i> |
| I Djelatnosti pružanja smještaja te pripreme i usluživanja hrane | 48 713 | 26 048 | 106,4 | 106,9 | 104,7 | 105,1 | 105,4 | 105,8 | <i>I Accommodation and food service activities</i> |
| J Informacije i komunikacije | 32 697 | 12 273 | 100,1 | 100,1 | 97,1 | 96,5 | 98,5 | 97,1 | <i>J Information and communication</i> |
| K Financijske djelatnosti i djelatnosti osiguranja | 35 196 | 24 303 | 99,0 | 99,1 | 98,3 | 98,7 | 98,7 | 99,1 | <i>K Financial and insurance activities</i> |
| L Poslovanje nekretninama | 6 207 | 2 715 | 101,0 | 100,8 | 84,0 | 76,8 | 85,3 | 78,0 | <i>L Real estate activities</i> |

| | | | | | | | | | | |
|---|---|---------|--------|-------|-------|-------|-------|-------|-------|--|
| M | Stručne, znanstvene i tehničke djelatnosti | 53 332 | 25 348 | 100,3 | 100,3 | 99,7 | 99,5 | 101,3 | 100,8 | <i>M Professional, scientific and technical activities</i> |
| N | Administrativne i pomoćne uslužne djelatnosti | 37 058 | 14 692 | 101,9 | 102,3 | 103,3 | 99,7 | 105,2 | 101,9 | <i>N Administrative and support service activities</i> |
| O | Javna uprava i obrana; obvezno socijalno osiguranje | 100 885 | 46 227 | 99,9 | 99,9 | 98,2 | 98,6 | 97,7 | 97,9 | <i>O Public administration and defence; compulsory social security</i> |
| P | Obrazovanje | 111 453 | 86 100 | 100,0 | 100,0 | 101,0 | 101,3 | 100,9 | 101,2 | <i>P Education</i> |
| Q | Djelatnosti zdravstvene zaštite i socijalne skrbi | 82 122 | 64 618 | 99,4 | 99,5 | 99,3 | 99,3 | 98,8 | 98,7 | <i>Q Human health and social work activities</i> |
| R | Umjetnost, zabava i rekreacija | 19 103 | 10 864 | 100,1 | 99,8 | 99,6 | 98,8 | 97,5 | 97,4 | <i>R Arts, entertainment and recreation</i> |
| S | Ostale uslužne djelatnosti | 12 062 | 6 676 | 100,7 | 101,4 | 99,1 | 98,4 | 91,4 | 89,0 | <i>S Other service activities</i> |

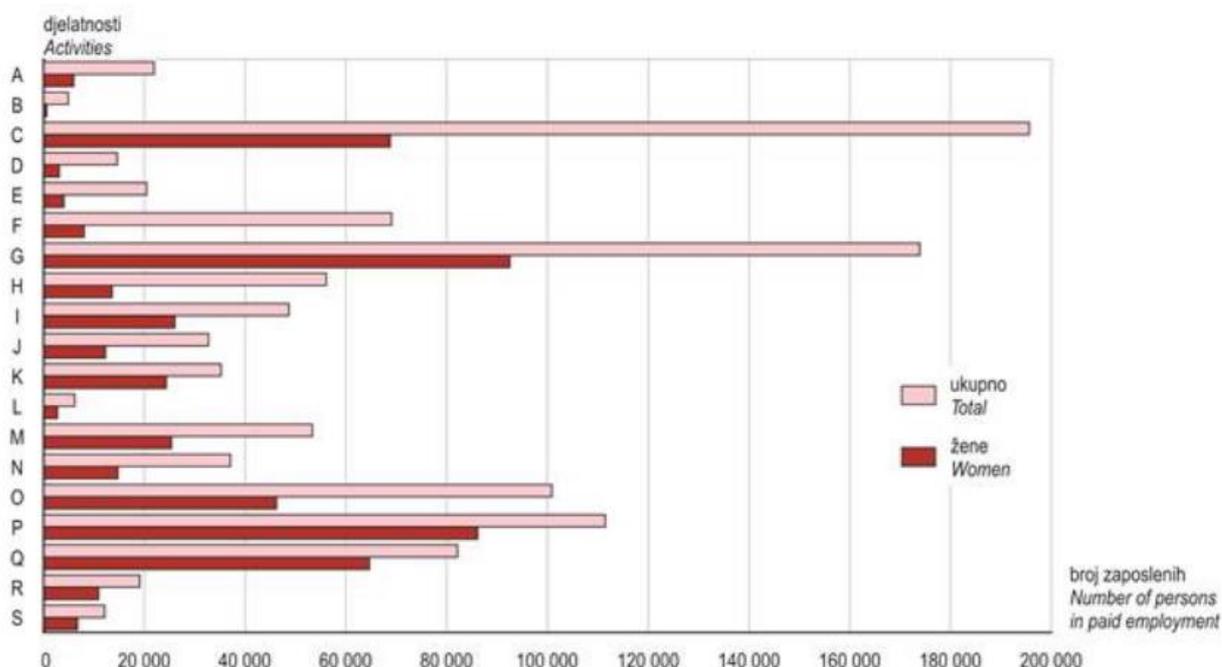
1) Područja djelatnosti T (Djelatnosti kućanstava kao poslodavaca; djelatnosti kućanstava koja proizvode različitu robu i obavljaju različite usluge za vlastite potrebe) i U (Djelatnosti izvanteritorijalnih organizacija i tijela) te njihovi odjeljci nisu iskazani u ovom priopćenju jer nisu obuhvaćeni istraživanjem.

2) Privremeni podatak

1) *Activity sections T (Activities of households as employers; undifferentiated goods – and services – producing activities of households for own use) and U (Activities of extraterritorial organisations and bodies) as well as their divisions are not presented in this first release, since they were not covered by the survey.*

2) *Provisional data.*

Employment in different activities 2015:



| | | | |
|---|---|---|---|
| A | Poljoprivreda, šumarstvo i ribarstvo | A | <i>Agriculture, forestry and fishing</i> |
| B | Rudarstvo i vadenje | B | <i>Mining and quarrying</i> |
| C | Prerađivačka industrija | C | <i>Manufacturing</i> |
| D | Opskrba električnom energijom, plinom, parom i klimatizacija | D | <i>Electricity, gas, steam and air conditioning supply</i> |
| E | Opskrba vodom; uklanjanje otpadnih voda, gospodarenje otpadom te djelatnosti sanacije okoliša | E | <i>Water supply; sewerage, waste management and remediation activities</i> |
| F | Građevinarstvo | F | <i>Construction</i> |
| G | Trgovina na veliko i na malo; popravak motornih vozila i motocikla | G | <i>Wholesale and retail trade; repair of motor vehicles and motorcycles</i> |
| H | Prijevoz i skladištenje | H | <i>Transportation and storage</i> |
| I | Djelatnosti pružanja smještaja te pripreme i usluživanja hrane | I | <i>Accommodation and food service activities</i> |
| J | Informacije i komunikacije | J | <i>Information and communication</i> |
| K | Financijske djelatnosti i djelatnosti osiguranja | K | <i>Financial and insurance activities</i> |
| L | Poslovanje nekretninama | L | <i>Real estate activities</i> |
| M | Stručne, znanstvene i tehničke djelatnosti | M | <i>Professional, scientific and technical activities</i> |
| N | Administrativne i pomoćne uslužne djelatnosti | N | <i>Administrative and support service activities</i> |
| O | Javna uprava i obrana; obvezno socijalno osiguranje | O | <i>Public administration and defence; compulsory social security</i> |
| P | Obrazovanje | P | <i>Education</i> |
| Q | Djelatnosti zdravstvene zaštite i socijalne skrbi | Q | <i>Human health and social work activities</i> |
| R | Umjetnost, zabava i rekreacija | R | <i>Arts, entertainment and recreation</i> |
| S | Ostale uslužne djelatnosti | S | <i>Other service activities</i> |

Fairs related to the metal industry

The Zagreb Fair hosts various fairs throughout the year with several related to metals. As fairs and programs are changing frequently, it is best to check out [The Zagreb Fair](#) website.

Some well-known ones are Modernpak, SASO (Split), BIAM, Welding, etc. BIAM is a fair for international (machine) tools, whereas Welding Zagreb is an international welding and welded construction fair and both of these are held every two years. Modernpak and SASO (Split) are briefly described below.

ZAGREB: MODERNSPAK

During the past years this fair has confirmed its renown as the most important business event in the field of building, not only in Croatia but in the whole region, since it gathers the leading home and world producers of construction materials, equipment and machines under a single roof. In parallel with Modernpak, there is also Intergrafika, an International Printing and Paper Industry Fair held at the same place and time.

The specialized Packaging Materials and Packing Technology Fair MODERNSPAK is the meeting spot of producers and consumers - users of packaging materials.

It gathers the experts in the field of packaging production and application and goods distribution, at the same time presenting the latest trends and innovations in packaging technology as well as modern solutions for ecologically acceptable packaging.

At the same time, it presents the latest trends and innovations in the packing technology as well as modern solutions for ecologically acceptable packaging.

Web: www.zv.hr/modernpa E-mail: modernpak@zv.hr

SPLIT: The SASO fair (October)

The Saso fair's dates for 2016 have not yet been confirmed. The fair is located on the Croatian coast and is usually held in October. Things that can be seen at the fair are listed below:

- Professional, clamping, measurement, manual, pneumatic and D.I.Y. tools
- Cutting and straining machine tools, processing lines, grindstones
- Special machines, packing machines, stone treatment machines
- Metal and plastics testing machines and devices (sensors and diagnostics)
- Tools and devices for thermal treatment of metal
- Transportation equipment, industrial robots, transportation lines
- Hydraulic machines and tools, pumps and motors for all purposes
- Compressors for all purposes and electrical tools (fixed and mobile)
- Agricultural tools and machines and other agricultural equipment
- Metal treatment machines and equipment
- Metal ware (screws, bolts, studs)
- Metal structures, metal materials
- Metal packing, non-ferrous metals
- Welding equipment, protection at welding, anticorrosive protection

At the national level, SASO represents one of the most significant civil construction, wood and metal industry, tool and equipment, energy, electrical engineering, telecommunications and craft and small

entrepreneurship fairs. SASO is an excellent opportunity to meet professionals, small and middle sized businesses, architects, engineers and investors: over 73% of all fair visitors are company owners or decision makers.

Web site: www.sasofair.com

E-mail: info@sajamsplit.com

Institutions

Faculty of Metallurgy (Sisak)

<http://www.simet.hr>

Institutional profile

The Faculty of Metallurgy, situated in the town of Sisak, is the only institution of its kind for education of metallurgical professionals in Croatia. As an academic institution for education and training of students in metallurgy, the Faculty has been active for more than 50 years. The activities of the Faculty of Metallurgy encompass the organization of scientific and professional symposia and conferences, and publication of books, manuals, and mimeographed course materials, as well as of papers and professional articles in journals and congress proceedings.

FACTS & FIGURES

Departments: 3

Teaching Staff: 29

Students: approx. 90

Programme emphasis

The study programmes of the Faculty of Metallurgy have been defined to comply with those of other higher education institutions in Europe, in accordance with the Bologna process. The number of applicants for the undergraduate course of study in Metallurgy is limited to fifty. The course lasts for three years, and upon completion the student acquires the academic title of Baccalaureus in Metallurgy. The graduate course of study which takes another two years (optional modules: Process Metallurgy, Metal Processing and Metal Casting) entitles the student to the degree of Master of Metallurgy. Upon completion of the postgraduate course of study, the student is awarded the academic degree of Doctor of Science in the field of Metallurgy.

Career prospects

Graduates in Metallurgy are given a choice of job opportunities at the domestic and European markets: in the metallurgical (ironworks, rolling plants, casting shops) and metalworking industries, in shipbuilding, in departments and laboratories for quality assessment and quality control of metal materials, in metal welding and heat treatment services, in scientific, professional and educational institutions, governmental agencies and local administrative bodies (county and municipal offices), etc.

Research orientation

The work of the Faculty of Metallurgy is organized in three departments that comprise seven laboratories and a chair in mathematics and informatics. The activities of the Faculty of Metallurgy focus on education of professionals in the field of metallurgy, and on scientific and professional research in metallurgy and

related fields (iron, steel, casting, hydrometallurgy, chemistry, electrometallurgy, metal deformation processing, thermal processing and mechanical engineering, physics and structure analysis, materials development and applications, etc..

Contact:

University of Zagreb-Faculty of Metallurgy

Aleja Narodnih Heroja 3

HR-44000 Sisak, Croatia

Tel: +385 44 53 33 79

Fax: +385 44 53 33 78

E-mail: dekanat@simet.hr

Croatian Foundry Association (since 1953)

Aims of the association:

- Gathering information from the Croatian foundry industry.
- Tracking the development and achievements in the foundry industry and informing the members.
- Establishing cooperation between the companies and the institutions of higher education, with the goal of preparing technical papers + graduation, master and doctoral theses.
- Experience exchange between foundries through technical papers presented on conferences or published in the Association's journal.
- Publishing (journal 'Ljevarstvo' and other technical foundry literature).
- Organising visits and exhibitions at the foundry industry trade shows.
- Cooperation with different institutions which have the influence on the foundry technology (Croatian Chamber of Commerce, Ministry of the Economy, Environmental protection and energy efficiency Fund etc.).
- Membership in the international foundry organisations.

Contact:

Froudeova 9, p.p. 28

HR-10020 Zagreb, Croatia

Fax: +385 1 6527284

Tel: +385 1 6524339

Mob: +385 98 597986

hulj@zg.t-com.hr

www.ljevarstvo.hr

Members of the Croatian Foundry Association

P.P.C, Buzet d.o.o. Buzet, Croatia

www.cimos.eu

3. Maj MID d.d. Rijeka, Croatia

www.3maj.hr

Brodosplit, Brodogradilište d.o.o.

www.brodosplit.hr

PC Ljevaonica, Split, Croatia

| | |
|---|--|
| TLM – TVP d.o.o. Šibenik, Croatia | www.tlm.hr |
| Metalska industrija Varaždin d.d. Varaždin, Croatia | www.miv.hr |
| Ferro-preis d.o.o. Čakovec, Croatia | www.ferro-preis.hr |
| Dalekovod d.d. Proizvodnja, RJ Ljevaonica, Velika Gorica, Croatia | www.dalekovod.hr |
| Metal product d.o.o. , Zagreb, Croatia | www.metal-product.hr |
| Vulkan d.o.o. , Zagreb, Croatia | www.vulkan.hr |
| | www.felis.hr |
| Strojar d.o.o. Bistra, Croatia | www.strojar.hr |
| Ljevaonica obojenih metala Kundija , Šapjane, Croatia | www.ljevaonica-obojenih-metala-kundija.hr |
| Ljevaonica Rešetar Željko , Šenkovec, Croatia | www.metalresetar.hr |
| Ljevaonica „Petar Dimitrov“ , Zagreb, Croatia | www.ljevaonica-petar-dimitrov.hr |
| Ljevaonica obojenih metala DUNI , Kumrovec, Croatia | www.duni.hr |
| Ljevaonica umjetnina Ujevic d.o.o. Zagreb, Croatia | www.ljevaonica-umjetnina.hr |
| Ljevaonica Bujan , Mađarevo, Croatia | www.ljevaonica-bujan.hr |
| Strojlijev Antolčić , Križevci, Croatia | www.strojlijev-antolcic.hr |
| Jezero metal , Jezero Klanječko, Croatia | www.jezero-metal-ivetic.hr |

Suppliers of foundry materials and equipment

| | |
|--|--|
| Elkem AS Branch office Zagreb, Croatia | www.foundry.elkem.com |
| Exoterm-IT , Kranj, Slovenia | www.exoterm.si |
| Petrokemija d.d. Kutina, Croatia | www.petrokemija.hr |
| Termit d.d. , Domžale, Slovenia | www.termit.si |
| Vektra d.o.o. Zagreb, Croatia | www.vektra.hr |
| Bentoproduct , Banja Luka, Bosnia & Hercegovina | www.bentoproduct.ba |

Association of production of metal and metal products

About the association

Inside the Croatian Chamber of Economy, within the Department of production and processing of metals, the Association controls the production of metals and metal products.

Productions of metals and metal products as part of the manufacturing industry are:

- DJ 27 - metal production

- DJ 28 - manufacture of metal products, except machinery and equipment

The metal production is characterized by the production of welded and seamless steel tubes, steel wire rods, rebar network construction, aluminium processing, metal casting and production of ferroalloys.

The processing industry includes the production of metal constructions, joinery of metal containers, radiators, tools, locks and hinges, metal containers, wire products, rivets, screws, chains, springs, metal furniture, steam boilers and other unspecified metal products.

The Association performs its duties through the following activities:

- Discussion between companies and the association
- Collaboration with relevant ministries and institutions in order to improve business conditions for members of the Association
- Connection with relevant companies and associations abroad
- Presentation of specialized fairs abroad
- Creation of lists and presentation of quality materials in English and Croatian.

The purpose of the Association is to be efficient and facilitate monitoring the activities of production of metals and fabricated metal products which gather 201 companies in following subsectors:

- Casting of metals
- Manufacture of tools

All information about the association:

Chamber of Commerce – Department of Industry

Draskovićeve 45, 10000 Zagreb

Tel: +385 1 4606 701

Fax: +385 1 4606 737

http://www.hgk.hr/association_of_production_of_metal_and_metal_products

industrija@hgk.hr

zcrnecki@hgk.hr