



17 RUDARSTVO IN PREDELOVALNE DEJAVNOSTI
MINING AND MANUFACTURING

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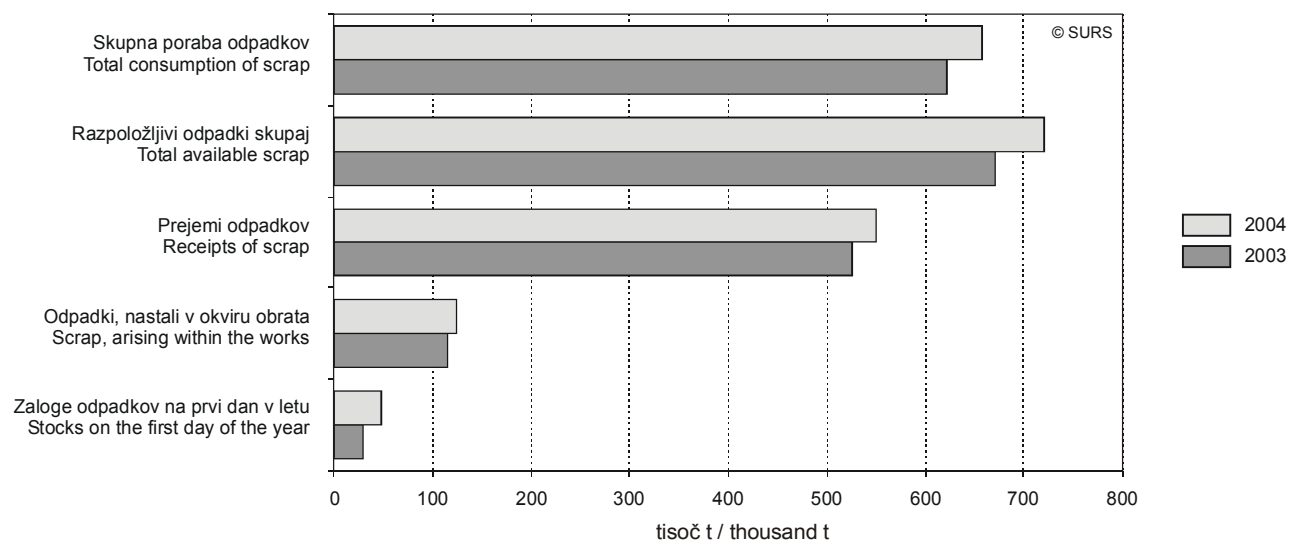
LETNI PODATKI O PROIZVODNJI ŽELEZA, JEKLA IN FERROZLITIN V SLOVENIJI, 2003, 2004

ANNUAL DATA ON PRODUCTION OF IRON, STEEL AND FERROALLOYS IN SLOVENIA, 2003, 2004

- ▶ Leta 2004 so proizvajalci železa, jekla in ferozlitin imeli na razpolago več kakor 720 000 ton jeklenih odpadkov in odpadkov iz železove zlitine. Od tega jih je bilo dejansko prejetih (kupljenih) skoraj 550 000 t, odpadkov, nastalih v obratu (lastni odpadki), pa je bilo približno 124 000 t. Poleg tega so imeli na prvi dan v letu nekaj več kakor 48 000 t zalog odpadkov.
Skupno so predelali več kakor 90 % vseh razpoložljivih odpadkov.
- ▶ Za svojo dejavnost so porabili več kakor 42 000 t trdnega goriva, pretežno koks, skoraj 200 t tekočega goriva in več kakor 2,6 mio GJ energetskih plinov.
- ▶ Prejeli in porabili so več kakor 860 000 MWh ur električne energije. Največ (skoraj 45 %) so je porabili v »drugih obratih«, 40 % pa za elektrojeklarne in kontinuirno litje.
- ▶ V letu 2004 so naložbe v industrijo železa in jekla znašale skoraj 6 milijard SIT; največ (več kakor 60 %) jih je bilo izvedenih v valjarnah, po 18 % pa v talilnice v jeklarnah in pri drugi opremi. Za zmanjšanje onesnaženja je bilo porabljenih manj od 5 % vseh naložb.
- ▶ V letih 2003 in 2004 je maksimalna proizvodnja surovega jekla znašala okoli 680 000 t; v toplih valjarnah so proizvedli skoraj oziroma nekaj več od 520 000 t izdelkov, v proizvodnji hladno valjanih izdelkov pa je bilo teh za 130 000 t.
- ▶ In 2004 producers of iron, steel and ferro alloys had over 720,000 tons of available steel and cast iron scrap, of which almost 550,000 tons were actually receipts of (bought) scrap and there was almost 124,000 tonnes of scrap that arises within the works. In addition, the stocks on the first day of the year amounted to over 48,000 tons.
In total, over 90% of all available scrap was recovered.
- ▶ In conducting their activity, the solid fuels consumption amounted to over 42,000 tons, whereas coke prevailed. Liquid fuel consumption amounted to almost 200 tons and gas consumption to over 2.5 million GJ.
- ▶ Over 860,000 MWh of electricity were used up, which were purchased in full. Almost 45% of electricity was used in "other plants" and 40% for electric melting shops and continuing casting.
- ▶ In 2003 investment expenditure in the iron and steel industry amounted to almost SIT 6 billion. Most of it (60%) was realised in rolling mills (flat products, long products), while 18% of investment was realised in steelworks melting shops and in other plants. Investments to combat pollution represented less than 5% of total investment.
- ▶ The maximum production of steel in 2003 and 2004 was around 680,000 tons; in hot rolling mills it was near or over 520,000 tons and in the case of cold rolled products it amounted to 130,000 tons.

Slika 1: Stanje jeklenih odpadkov in odpadkov železove litine

Chart 1: Steel and cast iron scrap balance sheet, Slovenia



1. Stanje jeklenih odpadkov in odpadkov iz železove litine, Slovenija
Steel and cast iron scrap balance sheet, Slovenia

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Št. No.:		2003	2004	
1	Zaloge odpadkov na prvi dan v letu	29.373	48.056	Stocks on the first day of the year
2	Odpadki, nastali v okviru obrata	115.181	123.688	Scrap, arising within the works
3	Prejemi odpadkov (a+b+c):	526.468	549.320	Receipts of scrap (a+b+c):
a	iz slovenskih virov	252.653	269.646	from domestic sources
b	iz držav članic EU	150.856	235.324	from other Community Member States
c	iz drugih držav	122.959	44.350	from third countries
4	Razpoložljivi odpadki skupaj (1+2+3)	671.022	721.064	Total available scrap (1+2+3)
5	Skupna poraba odpadkov:	622.416	657.867	Total consumption of scrap:
d	od tega v elektropeči	622.416	657.867	of which electric furnaces
e	od tega nerjavni odpadki	z	z	of which stainless scrap
6	Dobava odpadkov	z	z	Deliveries of scrap
7	Zaloge odpadkov na zadnji dan v letu (4-5-6)	z	z	Stocks on the last day of the year (4-5-6)

2. Poraba goriva in energije, Slovenija
Fuel and energy consumption, Slovenia

Št. No.:	Energenti	Merska enota Measurement unit	2003	2004	Energy Commodities
1	Poraba trdnega goriva (a+b)	t	40.159	42.523	Solid fuels consumption
a	poraba koksa	t	27.981	29.678	coke consumption
b	poraba drugega trdnega goriva	t	12.178	12.845	other solid fuels consumption
2	Poraba tekočega goriva	t	159	190	Liquid fuels consumption
3	Poraba plina (c+d+e+f)	GJ	1.386.641	2.664.576	Gas consumption
c	poraba plavžnih plinov	GJ	0	0	blast furnace gas consumption
d	poraba koksamiškega plina	GJ	0	0	coke oven gas consumption
e	poraba konverterskega plina	GJ	0	0	converter gas consumption
f	poraba drugih plinov	GJ	1.386.641	2.664.576	other gas consumption
4	Zunanja dobava plavžnega plina	GJ	0	0	External deliveries of blast furnace gas
5	Zunanja dobava konverterskega plina	GJ	0	0	External deliveries of converter gas

3. Bilanca stanja električne energije v jeklarski industriji, Slovenija
Annual statistics on the balance sheet for electricity in the steel industry, Slovenia

MWh

Št. No.:		2003	2004	
1	Viri električne energije (a+b)	867.908	862.530	Resources (a+b)
a	bruto proizvodnja električne energije	0	0	gross production
b	prejem električne energije od zunaj	867.908	862.530	receipts from outside
2	Poraba električne energije (3+4+5)	867.908	862.530	Used (3+4+5)
3	Poraba električne energije v tovarni (c+d+e+f+g+h+i)	866.393	860.883	Consumption by plant (c+d+e+f+g+h+i)
c	oprema za sintranje in pripravo vsipa	0	0	sinter plant and plant for preparation of burden
d	plavži in elektroplavži za proizvodnjo železa	0	0	blast furnaces and electric iron making furnaces
e	elektrojeklarnne in kontinuirno litje	365.103	340.027	electric melting shops and continuous casting
f	druge talilnice (jeklarne)	z	z	other melting shops and steelworks
g	valjarne	z	z	rolling mill
h	električne proizvodne postaje (generatorji za proizvodnjo elektrike)	0	0	electricity generating stations
i	drugi obrati (oprema)	403.902	375.405	other plants (equipment)
4	Dobava električne energije drugim	1.515	1.647	Deliveries to outside
5	Izguba električne energije	0	0	Losses



4. Naložbe v industriji železa in jekla, Slovenija

Investment expenditure in the iron and steel industry, Slovenia

mio SIT

Št. No.:		2003	2004	
1	Naložbe v koksarne	0,00	0,00	Investment in coking plants
2	Naložbe v opremo za pripravo vsipa	0,00	0,00	Investment in plant for load preparation
3	Naložbe v opremo za proizvodnjo grodlja in ferozlitin (vključno s plavži)	280,00	203,96	Investment in plant for ironmaking and ferro-alloys (including blast furnaces)
4	Naložbe v talilnice v jeklamah	2.062,05	1.027,39	Investment in steelworks melting shops
a	od tega naložbe v elektrojeklarne	2.062,05	1.027,39	of which investment in electro steelworks
5	Naložbe v kontinuirno litje	18,78	9,10	Investment in continuous casting
6	Naložbe v valjarne (b+c+d+e)	2.805,95	3.590,78	Investment in rolling mills (b+c+d+e)
b	ploščati izdelki	585,48	2.250,70	flat products
c	dolgi izdelki	169,96	214,58	long products
d	hladne valjarne za široke trakove	2.050,51	1.125,50	cold wide strip mills
e	naložbe (linije) za nanos površinskih prevlek ¹⁾	0,00	0,00	coating instalations ¹⁾
7	Naložbe v drugo opremo	1.718,33	912,41	Investment in other plants
8	Skupaj naložbe (1+2+3+4+5+6+7)	6.885,11	5.743,64	General total (1+2+3+4+5+6+7)
f	od tega naložbe za zmanjšanje onesnaženja	781,36	278,11	of which investments for reduction of pollution

1) Linije za pocinkanje, pokositrenje itd.
Line for zinc coating, tinning.

5. Maksimalna proizvodnja jekla in železa (kapacitete), Slovenija

Maximum possible production in the iron and steel industry (capacity), Slovenia

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Št. No.:		2003	2004	
1	Maksimalna proizvodnja koksa	0	0	Maximum possible production of coke
2	Maksimalna proizvodnja priprave vsipa	0	0	Maximum possible production of load preparation burden
3	Maksimalna proizvodnja grodlja in ferozlitin	25.000	45.000	Maximum possible production of pig iron and ferro-alloys
4	Maksimalna proizvodnja surovega jekla	675.000	680.000	Maximum possible production of crude steel
a	od tega iz elektropeči	675.000	680.000	of which from electric furnace
b	od tega vliito po kontinuirnem postopku	550.000	550.000	of which continuous casting
5	Maksimalna proizvodnja izdelkov, pridobljenih neposredno s toplim valjanjem (c+d)	519.000	520.000	Maximum possible production of products obtained directly by hot rolling (c+d)
c	ploščati izdelki	425.000	425.000	flat products
d	dolgi izdelki	94.000	95.000	long products
6	Maksimalna proizvodnja izdelkov, pridobljenih iz tople valjanih izdelkov (izdelki s površinsko prevleko niso upoštevani)	z	z	Maximum possible production of products obtained from hot rolling products (excluding surface coated products)
e	od tega hladno valjani izdelki	130.000	130.000	of which products obtained by cold rolling
7	Maksimalna proizvodnja izdelkov s površinsko prevleko	50.000	50.000	Maximum possible production of surface coated products

STATISTIČNA ZNAMENJA

z (podatek zaradi zaupnosti ni objavljen)

STATISTICAL SIGNS

z (data not published because of confidentiality)

METODOLOŠKA POJASNILA

Namen raziskovanja

Namen letnega raziskovanja o železu in jeklu je pridobiti informacije o preskrbljenosti železarske in jeklarske industrije z jeklenimi odpadki in odpadki iz železove zlitine, o porabi goriva in električne energije ter o naložbah v industriji železa in jekla, pa tudi o maksimalni proizvodnji železa in jekla.

METHODOLOGICAL EXPLANATIONS

Purpose of the survey

The purpose of the annual survey on iron and steel is to collect information on the supply of the iron and steel industry with steel and cast iron scrap, on fuel and electricity consumption, on investment expenditure in the iron and steel industry and on the maximum possible production in the iron and steel industry.



Enote opazovanja

Enote opazovanja so podjetja in enote v sestavi, ki proizvajajo železo, jeklo in ferrozlitine (skupina 27.1 Standardne klasifikacije dejavnosti).

Viri podatkov

Podatke za letno raziskovanje o železu in jeklu pridobimo z elektronskim vprašalnikom IND-Fe/L, ki smo ga prvič uporabili leta 2003. Vsebina vprašalnika je opredeljena z Uredbo (ES) št. 48/2004 Evropskega parlamenta in Sveta z dne 5. decembra 2003 in Uredbo Komisije (ES) št. 772/2005 z dne 20. maja 2005.

Zajetje

V raziskovanje so zajeta vsa podjetja in enote v sestavi, ki proizvajajo železo, jeklo in ferrozlitine (skupina 27.1 Standardne klasifikacije dejavnosti), ne glede na število zaposlenih.

Način zbiranja podatkov

Raziskovanje IND-Fe/L izvajamo letno z elektronskim vprašalnikom. Izbrane enote morajo Statističnemu uradu poslati izpolnjene vprašalnike najpozneje do 21. februarja, s podatki za preteklo leto.

Definicije

Odpadki so:

Kateri koli železni ali jekleni odpadki, ki so nastali med proizvodnjo in predelavo železa in jekla ali so bili pridobljeni iz starih proizvodov iz železa in jekla, primernih za pretaljevanje (vključno s kupljenimi odpadki), a brez prežganih kalciniranih odlitkov ali odlitkov, ki so kislinsko močno korodirani.

Livni žlebi in drugi nalivki (vlivanje od/z vrha ali od spodaj), vključno z lijaki za ulivanje, livnimi sistemi, odpadki iz nalivnih cevi pri spodnjem livu itd., pa tudi nekakovostni in okvarjeni ingoti, ki niso vključeni v proizvodnjo.

Oprimki v livnem loncu (razen iz litja v pesek).

Odpadki pa ne vključujejo ostankov, v katerih je železo, precej onesnaženo z nekovinskimi materiali, in ki se pojavijo med taljenjem, toplotno ali mehanično obdelavo, na primer: nalivki iz plavža, jeklarniška žlindra, oprimki iz stene peči itd.

Zaloge odpadkov na prvi dan v letu

Prikazane so zaloge vse tovarne, vključno s tistimi v enotah v sestavi (upoštevajoč jeklolivarne), a brez zalog v železolivarnah.

Odpadki, nastali v okviru obrata, vključujejo:

Nalivke in druge odpadke od litja iz jeklam in integriranih jeklolivarn: nalivke, nalivke iz litja jekla. Vključeni so okvarjeni in nekakovostni ingoti, ki jih ne štejemo v proizvodnjo.

Procesne odpadke, ki nastanejo pri proizvodnji polizdelkov ter valjanih in kovanih proizvodov, tudi ostanke ingotov, nepopolne ingote in neustrezno jekleno litino, potem ko so zapustili topilnico ali livarno (torej po tem, ko so bili šteti v proizvodnji surovega ali litega jekla). Vključeni so odpadki, nastali v lokalno integrirani jeklolivarni, kovačnici, obratih za proizvodnjo cevi in žic, v hladnih valjarnah, tovarnah za kovinske konstrukcije in drugih obratih, v katerih predelujejo jeklo, razen železolivarn. Stranski odpadki iz peči, ki bodo znova valjani v lastni valjarni, ne štejejo med

Observation units

Observation units are enterprises and their units producing iron, steel and ferro-alloys (group 27.1 of the Standard Classification of Activities).

Sources

Data for the annual survey on iron and steel are collected with the electronic questionnaire IND-Fe/L, which was introduced in 2003. The content of the questionnaire is determined with Regulation (EC) No. 48/2004 of 5 December 2003 and Regulation (EC) 772/2005 of 20 May 2005.

Coverage

The survey covers all enterprises and their units producing iron, steel and ferro-alloys (group 27.1 of the Standard Classification of Activities), irrespective of the number of employees.

Method of data collection

The IND-Fe/L survey is carried out yearly with the electronic questionnaire. The selected units have to send the answered questionnaires to the Statistical Office by 21 February, at the latest containing data for the past year.

Definitions

Scrap is considered to be:

Any iron or steel scrap arising during the production and processing of iron or steel or recovered from old articles of iron or steel which is suitable for remelting (including scrap which is purchased; but not including burnt calcinated castings or castings attacked by acid).

Runners and other steel pouring scrap (normal or bottom-poured), including tunnels and gates, waste from delivery pipes in bottom pouring, etc., and also reject and defective ingots not included in production.

Ladle skulls (except from sand casting).

On the other hand, waste containing iron which is significantly contaminated with non-metallic material and which arises during melting or heat treatment or mechanical treatment should **not be included under scrap**, for example blast-furnace runners, launders from casting, splash and other waste from pouring of iron, waste from casting pits, steelworks slag, scale from reheating furnaces and rolling and forging, splatter from converters, flue skull and lip skull, skulls and remainders arising from sand casting.

Stocks on the first day of the year

These comprise stocks of the entire plant, including locally integrated activities (including steel foundries) with the exception of stocks held in iron foundries.

Scrap, arising within the works includes:

Runners and other casting scrap from the steelworks and from integrated steel foundries: sprues, dozzle from steel casting. They include faulty and reject ingots not counted in production.

Process scrap which arises in the manufacture of semis and rolled products including hire working, also ingot waste and defective ingots and steel casting which are detected as being defective after having left the smelting plant or foundry (i.e. after they have been counted in production of crude or cast steel). Included is scrap arising in locally integrated steel foundries, forges, tube works and wire works, and cold rolling plants, works for metal construction and other departments processing steel, with the exception of iron foundries Mill scrap which is to be re-rolled in own

nove odpadke.

Pridobljene odpadke, kakršni sta jeklo in železo, ki nastaneta pri popravilih in rušitvah stare opreme, strojev in naprav, npr.: kalupov za ingote.

Prejem odpadkov

Odpadki, prejeti s posredništvom trgovca, so v tabeli 1 navedeni pod zap. št. 3 a, b in c.

O odpadkih, ki nastanejo pri razgradnji ladij v EU, je treba poročati kot o domačih odpadkih in odpadkih Unije.

Prejem odpadkov iz slovenskih virov

Zajet je prejem od drugih enot istega podjetja v isti državi, skupaj s plavži, jeklarnami, valjarnami, železolivarnami (vključno z integriranimi železolivarnami). Prejem odpadkov iz obratov drugih podjetij in iz obratov, ki ne proizvajajo ali uporabljajo jekla, npr. rudnikov, morajo biti izključeni.

Sem spadajo tudi prejemi odpadkov z domačega trga, ki so bili prejeti neposredno iz nejeklarskih podjetij, kakršna so jeklo- in železolivarne, obrati za proizvodnjo cevi, kovačnice, gradbena industrija, ladjedelnice itd.

Skupna poraba odpadkov

Prikazana je skupna količina odpadkov, porabljenih za proizvodnjo železa v plavžih, električnih pečeh za proizvodnjo železa in sintramah, pa tudi skupna poraba odpadkov za celotno proizvodnjo surovega jekla, vključno s proizvodnjo posebnega grodja s ponovnim naogljitvenjem jekla in proizvodnjo lokalno združenih jeklolivarn.

Poraba goriv in energije:

Pri plavžih in elektropečeh za izdelovanje železa je upoštevana le poraba goriva, ki je neposredno uporabljeno v plavžu kot nadomestek za koks, medtem ko se poraba v pečeh na vroči zrak, centrifugalnih vetrilih in drugi pomožni opremi za plavže ne upošteva.

Talilnice vključujejo talilnice v jeklarnah in kontinuirno litje.

Elektrarne vključujejo porabo goriva in energijo, porabljeno za proizvodnjo vse elektrike.

Koks

Vključuje koks in polkoks, petrolejski koks in koksov zdrob.

Drugo trdno gorivo

Sem sodijo premog in aglomerati, lignit in briketi.

Tekoče gorivo

Upoštevano je vsako tekoče gorivo v jeklarnah in železarnah ter pomožnih obratih in elektrarnah znotraj podjetja - razen v koksarniških pečeh.

Poraba plina

Prikazana je neto poraba; izgube in odgoreli plini niso vključeni. Poraba plina je prikazana za suhi plin pri 0° C in 760 mm/Hg.

Zunanja dobava plavžnega plina

Zajeta je celotna oddaja plavžnega plina za javna naročila, v integrirane jeklarske koksarne in druge jeklarne.

rolling mills does not count as new scrap.

Recovered scrap such as steel and cast iron arising from repair and dismantling of old plant, machinery and apparatus, e.g. ingot moulds.

Receipts of scrap

Scrap received via a merchant acting as an intermediary is allocated as appropriate to the sources given under items a, b and c in Table 1.

Ship-breaking scrap from demolition yards in the Community should be counted as domestic and Community scrap.

Receipts of scrap from domestic sources

This includes receipts of scrap from other plants or divisions of the same company in the same country, including blast furnaces, steel works, rolling mills, iron foundries (including the integrated iron foundries). Receipts of scrap from other steel companies' works and from works other than those making or using steel, e.g. mines, should be included.

This also includes receipts of scrap from the domestic market received directly from non-steel companies such as steel or iron foundries, tube works, forges, construction industry, extraction industry, shipyards, railway companies, engineering industry and metal manufacture, etc.

Total consumption of scrap

Consumption total shows the total quantities of scrap consumed in the production of iron in blast-furnaces, electric iron-making furnaces and also sinter plants, as well as the total consumption of scrap used in the total production of crude steel including the manufacture of special pig iron by recarburising steel and production of locally integrated steel foundries.

Fuel and energy consumption:

As far as blast furnaces and electric iron making furnaces are concerned, only the consumption of fuel that is directly charged or used in furnaces as substitute for coke, that is, excluding consumption in hot blast stoves, fans and other ancillary blast furnace equipment, is taken into account.

Melting shops include steelworks melting shops and continuous casting.

Electricity generating stations include consumption of fuel and energy used to produce all electricity in the works or in the joint generating stations of several steelworks.

Coke

Includes coke, semi-coke, petroleum coke and coke fines.

Other solid fuels

Include coal and agglomerates, lignite and briquettes.

Liquid fuels

Includes the consumption of all liquid fuels in the iron and steelworks and their auxiliary plants, in electricity generating stations, but with the exception of coke ovens.

Gas consumption

The consumption to be recorded should be net consumption, not including losses and gas burnt off. Gas consumption is to be recorded for dry gas at 0° and 760 mm/Hg.

External deliveries of blast furnace gas

They include total external deliveries of blast furnace gas to public supply, to integrated steel coking plants, to other steelworks and to other customers.



Zunanja dobava konverterskega plina

Zajeta je celotna oddaja konverterskega plina za javna naročila, v integrirane jeklarske koksarne in druge jeklarne.

Naložbe v industriji železa in jekla

Naložbe so izdatki v opredmetena osnovna sredstva v obdobju opazovanja. Vključujejo nova in obstoječa opredmetena kapitalna sredstva, ki jih je kupila ali proizvedla tretja stran za lastno uporabo (to je kapitalizirana proizvodnja opredmetenih kapitalnih sredstev), imajo življenjsko dobo, daljšo od enega leta, in vključujejo neproizvedena opredmetena sredstva, kakršna je zemlja. Prag za življenjsko dobo sredstva, ki je lahko kapitalizirano, se lahko zviša v skladu z računovodskimi postopki, ki zahtevajo daljšo pričakovano življenjsko dobo od zgoraj navedene enoletne.

Naložbe so ovrednotene pred prilagoditvijo vrednosti in pred odbitkom dohodka od odtujitve. Kupljena sredstva so vrednotena po nakupni ceni, torej so vsi v vrednost tudi stroški prevoza in namestitve, pristojbine in davki. Lastna opredmetena sredstva so vrednotena po stroških proizvodnje. Sredstva, pridobljena s postopkom prestrukturiranja (združitve, prevzem, likvidacija, odcepitve), so izključena. Nakupi majhnega orodja, ki ni kapitalizirano, so vključeni v trenutne odhodke.

Naložbe se nanašajo na vse dodatke, spremembe, izboljšave in preнове, ki podaljšajo življenjsko dobo ali proizvodno zmogljivost kapitalnih sredstev. Izključeni so stroški vzdrževanja, pa tudi vrednost in trenutni odhodki za kapitalna sredstva, uporabljena po najemnih ali zakupnih pogodbah.

Naložbe spremljamo v obdobju, v katerem so bile oddane, vključene v proizvodnjo, fakturirane ali plačane.

Naložbe v koksarne

Vključujejo peči, skupaj s koksarnami in pomožno opremo, kakršna so polnila, potiskala in drobilniki itd., ter vagone za koks in hladilni stolp. Vključene so tudi pomožne naprave.

Naložbe v opremo za pripravo vsipa

Vključuje opremo za pripravo železove rude in vsipa.

Naložbe v opremo za proizvodnjo grodlja in ferozlitin (vključno s plavži)

Vključujejo električne peči za proizvodnjo grodlja, nizke jaškovne peči in drugo opremo pred taljenjem.

Naložbe v talilnice v jeklarnah

Postopek AOD, vakuumske obdelave, obdelave v livarskem loncu itd. se prišteva med poznejše obdelave, ki sledijo glavnemu postopku, zato ustrezni naložbeni izdatki sodijo v to kategorijo, ki pokriva ustrezne končne postopke.

Če jeklarna vključuje (ali bo vključevala) talilnico jekla in mešalnik, so odhodki, povezani z mešalnikom, vključeni v ustrezno talilnico. Če jeklarna nima talilnice, je ta izdatek vključen v odhodke, povezane s plavži.

Naložbe v električne peči

Sem je vključen postopek EAF za proizvodnjo surovega jekla z električnimi (obličnim ali indukcijskim) pečmi.

Naložbe v kontinuirno litje**External deliveries of converter gas**

They include total external deliveries of converter gas to public supply, to integrated steel coking plants, to other steelworks and to other customers.

Investment expenditure in the iron and steel industry

Investment expenditure represents investment during the reference period in tangible goods. Included are new and existing tangible capital goods, whether bought from third parties or produced for own use (i.e. capitalised production of tangible capital goods), having a service life of more than one year and including non-produced tangible goods such as land. The threshold for the useful life of a good that can be capitalised may be increased according to company accounting practices where these practices require a greater expected service life than the one-year threshold indicated above.

All investments are valued prior to (i.e. gross of) value adjustments, and before the deduction of income from disposals. Purchased goods are valued at purchase price, i.e. transport and installation charges, fees, taxes and other costs of ownership transfer are included. Own produced tangible goods are valued at production cost. Goods acquired through restructuring process (such as mergers, take-overs, break-ups, spin-offs) are excluded. Purchases of small tools which are not capitalised are included under current expenditure.

Also included are all additions, alterations, improvements and renovations which prolong the service life or increase the productive capacity of capital goods. Current maintenance costs are excluded as are the value and current expenditure on capital goods used under rental and lease contracts.

Investments are recorded in the reference period in which they are delivered, or in which they enter into the production process, or in which they are invoiced, or in which they are paid for.

Investment in coke-ovens

Ovens including coke-oven batteries with ancillary equipment such as charges, pushers, crushers, etc., as well as coke cars and quenching towers.

Investment in plants for load preparation

Includes plant for the preparation of iron ore and burden.

Investment in plants for iron-making and ferro-alloys (including blast furnaces)

Include electric pig-iron furnaces, low shaft furnaces and other pre-melting plants.

Investment in steelworks melting shops

The AOD process, vacuum and ladle treatments, etc. are regarded as treatment subsequent to the final process; the relevant investment expenditure (like all production) must be included in the category covering the appropriate final process.

When the works includes (or will include) a steel melting shop and a mixer, the expenditure relating to the mixer should be included with the corresponding melting shop. If the works has no melting shop, this expenditure should be included with the expenditure relating to the blast furnaces.

Investment in electrical ovens

Includes EAF process for crude steel production, by electric (arc or induction) furnace.

Investment in continuous casting

Povezujejo se s kontinuirno litimi palicami, blumi, gredicami, profili in polizdelki za cevi, razen končnih delov.

Naložbe v valjarne

Ne glede na vrsto valjarne so prikazane naložbe v valjarno samo, pa tudi naložbe, ki so povezane s posameznimi fazami pred valjanjem (npr.: ohlajanje, rezanje).

Naložbe v drugo opremo

Gre za naložbe v vse centralne naprave in distribucijska omrežja za električno energijo, plin in vodo, paro, zrak in kisik, prevoz, strojne delavnice, laboratorije in vse druge naprave, ki so del celotne tovarne, vendar jih ni mogoče razvrstiti v posamezen obrat. Sem sodijo tudi blume, palice in gredice, če našteji polizdelki niso kontinuirno liti.

Naložbe za zmanjšanje onesnaženja

Sem sodijo kapitalski odhodki za metode, tehnologije, postopke in opremo, namenjeno zbiranju in odstranjevanju onesnaženja in onesnaževal (zračnih emisij, tekočih in trdnih odpadkov) po njihovem nastanku, preprečevanju njihovega širjenja, merjenju ravni onesnaženja in ravnanju z onesnaževali, ter njihovo odstranjevanje, če ta izhajajo iz tovarne.

Sem sodijo tudi odhodki okoljskih področij: varstvo zraka in podnebja, ravnanje z odpadno vodo, ravnanje z odpadki in druge okoljevarstvene dejavnosti, kakršne so sanacija tal, podtalnice in površinskih vod, zmanjšanje hrupa in tresljajev, varstvo biotske raznovrstnosti in krajine, zaščita pred sevanjem, raziskovanje in razvoj, splošno okoljsko upravljanje, izobraževanje itd.

Maksimalna proizvodnja jekla in železa

Maksimalna proizvodnja se ujema s proizvodnjo, ki bi jo tovarne lahko ustvarile v letu opazovanja v normalnih delovnih razmerah ter z upoštevanjem popravil, vzdrževanja in ustaljenih praznikov, z opremo, ki je na razpolago v začetku leta, ter z upoštevanjem dodatne opreme, ki bo vgrajena, in opreme, ki bo prenehala delovati v letu opazovanja.

Pri izračunu maksimalne možne proizvodnje se predvideva, da so na razpolago surovine, oprema in polizdelki, da je ponudba normalna, da prodaja poteka neovirano, da ni tehničnih zastojev ali stavk delavcev, pa tudi ne izrednih razmer, kakršne so poplave in podobno.

Objavljanje

Statistične informacije

Relates to continuously cast slabs, blooms, billets, beam blanks and tube semis, excluding head and tail crops.

Investment in rolling mills

For each type of rolling mill, account should be taken of not only the expenditure relating to the mill itself, but also of those expenditures relating to plant upstream of the mills (e.g. reheating furnaces).

Investment in other plants

All the central plants and distribution networks for electric power, gas, water, steam, air and oxygen, transport, engineering workshops, laboratories and all other installations, which form part of the whole works but cannot be classified as part of a particular sector. Blooming, slabbing and billet mills when these semi-products are not continuously cast.

Investment to combat pollution

Capital expenditure for methods, technologies, procedures and equipment for collecting and removing pollution and pollutants (air emissions, liquid and solid waste) after the generation, prevention of their distribution and measuring the pollution level, management of pollutants and their removal in cases when they are produced at the factory.

Also expenditure for environment such as protection of air and climate, waste water management, waste management and other environmental protection activities such as remediation of soil, groundwater, surface water, abatement of noise and vibrations, protection of biodiversity and landscape, radiation protection, research and development, general environment management, education, etc.

The maximum possible production in the iron and steel industry

The maximum possible annual production is the maximum production that can be attained during the year in question in ordinary working conditions, having regard to repairs, maintenance, and normal holidays, with the equipment available at the beginning of the year, taking account also of the supplementary production of equipment that will come into operation and existing equipment that should definitely be closed down during the course of the year.

In calculating the maximum possible production it is assumed that raw materials, equipment and semi-finished products are available, that supply is normal, that there is no problem with the disposal of products, no technical accidents, lockouts, strikes or serious interruptions due to the weather, e.g. floods, etc.

Publishing

Rapid Reports

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Izdaja, založba in tisk Statistični urad Republike Slovenije, Ljubljana, Vožarski pot 12 - **Uporaba in objava podatkov dovoljena le z navedbo vira** - Odgovarja generalna direktorica mag. Irena Križman - Urednica zbirke Statistične informacije Marina Urbas - Urednica podzbirke Nika Katnič - Slovensko besedilo jezikovno uredila Ivanka Zobec - Angleško besedilo jezikovno uredil Boris Panič - Naklada 95 izvodov - ISSN zbirke Statistične informacije 1408-192X - ISSN podzbirke Rudarstvo in predelovalne dejavnosti 1408-8908 - Informacije daje Informacijsko središče, tel.: (01) 241 51 04 - E-mail: info.stat@gov.si - http://www.stat.si.

Edited, published and printed by the Statistical Office of the Republic of Slovenia, Ljubljana, Vožarski pot 12 - **These data can be used provided the source is acknowledged** - Director-General Irena Križman - Rapid Reports editor Marina Urbas - Subject-matter editor Nika Katnič - Slovene language editor Ivanka Zobec - English language editor Boris Panič - Total print run 95 copies - ISSN of Rapid Reports 1408-192X - ISSN of subcollection Mining and manufacturing 1408-8908 - Information is given by the Information Centre of the Statistical Office of the Republic of Slovenia, tel.: +386 1 241 51 04 - E-mail: info.stat@gov.si - http://www.stat.si.