

YEAR: XLV.

ZAGREB, 28
NOVEMBER,
2008

NUMBER: 2.1.3/10.

OBLIGED TO NOTIFY DATA SOURCE

INDUSTRIAL PRODUCTION VOLUME INDICES SEASONALLY ADJUSTED TIME SERIES AND TREND INDICES, 2008

In October 2008, the industrial production in the Republic of Croatia was by 0.1% higher than in September 2008.

The monthly industrial production in the Republic of Croatia in October 2008, as compared to October 2007, increased by 0.4%.

In the period from November 2007 to October 2008, the total industrial production increased by 2.3%, as compared to the industrial production in the period from November 2006 to October 2007.

Regarding the NKD 2002. sections, in October 2008, as compared to the previous month, Manufacturing increased by 0.3% while Mining and quarrying decreased by 0.3% and Electricity, gas and water supply by 0.5%. Regarding the MIGs 2001, Capital goods increased by 1.4% and Intermediate goods by 0.3%, while Energy decreased by 0.8%, Durable consumer goods by 0.3% and Non-durable consumer goods by 0.1%.

1. MONTHLY CHAIN CHANGE RATES (month compared with the previous one) CALCULATED ON TREND INDEX BASIS

	2007.					2008.									
	XI.	XII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.			

Total C, D and E	0,1	0,2	0,3	0,2	0,1	0,0	0,0	-0,1	-0,2	-0,3	-0,1	0,1
According to NKD 2002. sections												
C Mining and quarrying	-0,4	-0,1	0,2	0,3	0,0	-0,2	0,2	0,3	-0,4	-1,3	-1,2	-0,3
D Manufacturing	0,1	0,2	0,4	0,4	0,2	0,0	-0,1	-0,1	-0,2	-0,3	0,0	0,3
E Electricity, gas and water supply	0,4	0,0	-0,1	-0,3	-0,1	0,2	0,4	0,1	-0,3	-0,2	-0,3	-0,5
According to MIGs 2001												
AI Intermediate goods	-0,2	0,1	0,3	0,3	0,0	-0,2	-0,3	-0,2	-0,2	-0,2	0,0	0,3
AE Energy	-0,9	-1,1	-0,2	-1,4	-1,0	1,1	2,5	1,2	-1,6	-1,7	-1,2	-0,8
B Capital goods	0,9	1,3	1,2	0,8	0,1	-0,9	-1,0	-0,6	-0,6	0,0	1,1	1,4
CD Durable consumer goods	-0,7	-0,8	-0,4	0,0	-0,1	-0,3	-0,2	0,0	0,0	-0,2	-0,3	-0,3
CN Non-durable consumer goods	0,3	0,3	0,3	0,3	0,3	0,2	0,1	0,0	0,0	-0,1	-0,2	-0,1

In October 2008, as compared to the same production in October 2007, the industrial production in Manufacturing increased by 0.8% while in Mining and quarrying it decreased by 2.9% and in Electricity, gas and water supply by 0.6%. Regarding the MIGs 2001, Capital goods increased by 3.8% and Non-durable consumer goods by 1.5%, while Intermediate goods decreased by 0.2%, Energy by 5.1% and Durable consumer goods by 3.1%.

2. MONTHLY INTER-ANNUAL AND ANNUAL CHANGE RATES BASED ON TREND INDEX

	Month compared with same month last year						Annual rates
	2008.						XI. 2007. – X. 2008.
	V.	VI.	VII.	VIII.	IX.	X.	XI. 2006. – X. 2007.
Total C, D and E	2,3	1,9	1,3	0,8	0,5	0,4	2,3
According to NKD 2002. sections							
C Mining and quarrying	0,0	1,5	1,6	-0,6	-2,7	-2,9	-1,4
D Manufacturing	1,7	1,3	0,9	0,7	0,7	0,8	2,1
E Electricity, gas and water supply	6,0	4,7	3,0	1,8	0,8	-0,6	5,3
According to MIGs 2001							
AI Intermediate goods	-1,6	-1,6	-1,6	-1,5	-0,9	-0,2	-1,1
AE Energy	4,1	4,8	1,8	-0,7	-3,0	-5,1	2,5
B Capital goods	2,7	2,1	2,1	2,4	3,0	3,8	3,7
CD Durable consumer goods	-3,3	-2,9	-2,9	-3,2	-3,3	-3,1	-1,9
CN Non-durable consumer goods	4,7	4,0	3,4	2,8	2,1	1,5	4,6

Comparing the last twelve months with the previous ones (average annual chain change rate), Manufacturing increased by 2.1% and Electricity, gas and water supply by 5.3%, while Mining and quarrying decreased by 1.4%. Regarding the MIGs 2001, Energy increased by 2.5%, Capital goods by 3.7% and Non-durable consumer goods by 4.6%, while Intermediate

goods decreased by 1.1% and Durable consumer goods by 1.9%.

3. MONTHLY CHAIN CHANGE RATES OF SELECTED NKD 2002. DIVISIONS, CALCULATED ON TREND INDEX BASIS

	2008.					
	V.	VI.	VII.	VIII.	IX.	X.
11 Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying	0,3	0,4	-1,1	-2,9	-2,4	-0,2
15 Manufacture of food products and beverages	0,2	0,3	0,4	0,4	0,3	0,3
21 Manufacture of pulp, paper and paper products	-0,2	0,0	-0,1	-0,4	-0,4	-0,4
22 Publishing, printing and reproduction of recorded media	1,1	0,3	-0,7	-1,4	-1,9	-1,6
23 Manufacture of coke, refined petroleum products and nuclear fuel	-0,4	-0,9	-1,8	-2,1	-1,8	-1,0
24 Manufacture of chemicals and chemical products	1,0	0,9	0,7	0,4	0,5	0,7
26 Manufacture of other non-metallic mineral products	-0,9	0,9	-0,2	-0,8	2,3	2,8
28 Manufacture of fabricated metal products, except machinery and equipment	-0,1	0,1	0,3	0,4	0,6	0,8
29 Manufacture of machinery and equipment n.e.c.	1,2	0,8	0,3	0,6	1,4	1,8
31 Manufacture of electrical machinery and apparatus n.e.c	-0,5	-0,2	-0,4	-0,8	-0,8	-0,5
35 Manufacture of other transport equipment	0,3	0,5	0,4	0,3	0,1	0,1
40 Electricity, gas, steam and hot water supply	1,6	0,5	-0,9	-0,4	-0,4	-1,3

According to the selected NKD 2002. divisions, in October 2008, as compared to the previous month, the industrial production in Manufacture of food products and beverages increased by 0.3%, in Manufacture of chemicals and chemical products by 0.7%, in Manufacture of other non-metallic mineral products by 2.8%, in Manufacture of fabricated metal products, except machinery and equipment by 0.8%, in Manufacture of machinery and equipment n.e.c. by 1.8%, in Manufacture of other transport equipment by 0.1%, while in Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying it decreased by 0.2%, in Manufacture of pulp, paper and paper products by 0.4%, in Publishing, printing and reproduction of recorded media by 1.6%, in Manufacture of coke, refined petroleum products and nuclear fuel by 1.0%, in Manufacture of electrical machinery and apparatus n.e.c. by 0.5% and in Electricity, gas and water supply by 1.3%.

4. MONTHLY INTER-ANNUAL AND ANNUAL CHANGE RATES BASED ON TREND-CYCLE INDEX, ACCORDING TO SELECTED NKD 2002. DIVISIONS

	Month compared with same month last year					Annual rates
	2008.					XI. 2007. – X. 2008.
	VI.	VII.	VIII.	IX.	X.	XI. 2006. – X. 2007.
11 Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying	-0,6	-0,7	-5,6	-9,8	-9,4	-4,7
15 Manufacture of food products and beverages	3,2	3,4	3,5	3,6	3,5	3,6
21 Manufacture of pulp, paper and paper products	-1,2	-1,5	-1,9	-2,2	-2,4	-0,3
22 Publishing, printing and reproduction of recorded media	11,5	7,5	3,8	0,3	-2,4	11,5
23 Manufacture of coke, refined petroleum products and nuclear fuel	-11,6	-13,0	-14,6	-16,0	-16,5	-10,5
24 Manufacture of chemicals and chemical products	5,9	6,2	6,4	7,2	8,1	4,9
26 Manufacture of other non-metallic mineral products	-2,1	-1,8	-3,0	1,1	5,5	-2,9
28 Manufacture of fabricated metal products, except machinery and equipment	6,1	5,6	5,2	4,9	4,9	7,8
29 Manufacture of machinery and equipment n.e.c.	6,5	7,0	7,9	9,6	11,6	4,8

31 Manufacture of electrical machinery and apparatus n.e.c		-11,0	-10,0	-8,9	-8,2	-7,4	-8,7
35 Manufacture of other transport equipment		4,1	4,8	5,5	6,0	6,0	3,1
40 Electricity, gas, steam and hot water supply		6,2	2,6	1,5	0,7	-2,2	6,7

In October 2008, as compared to the same month of the previous year, according to the selected NKD 2002. divisions, the industrial production in Manufacture of food products and beverages increased by 3.5%, in Manufacture of chemicals and chemical products by 8.1%, in Manufacture of other non-metallic mineral products by 5.5%, in Manufacture of fabricated metal products, except machinery and equipment by 4.9%, in Manufacture of machinery and equipment n.e.c. by 11.6%, in Manufacture of other transport equipment by 6.0%, while in Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying it decreased by 9.4%, in Manufacture of pulp, paper and paper products by 2.4%, in Publishing, printing and reproduction of recorded media by 2.4%, in Manufacture of coke, refined petroleum products and nuclear fuel by 16.5%, in Manufacture of electrical machinery and apparatus n.e.c. by 7.4% and in Electricity, gas, steam and hot water supply by 2.2%.

In the period from November 2007 to October 2008, as compared to the previous twelve months, according to the selected NKD 2002. divisions, the industrial production increased in the following divisions: Manufacture of food products and beverages by 3.6%, Publishing, printing and reproduction of recorded media by 11.5%, in Manufacture of chemicals and chemical products by 4.9%, in Manufacture of fabricated metal products, except machinery and equipment by 7.8%, Manufacture of machinery and equipment n.e.c. by 4.8%, Manufacture of other transport equipment by 3.1% and Electricity, gas, steam and hot water supply by 6.7%, while in Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying it decreased by 4.7%, Manufacture of pulp, paper and paper products by 0.3%, in Manufacture of coke, refined petroleum products and nuclear fuel by 10.5%, in Manufacture of other non-metallic mineral products by 2.9% and in Manufacture of electrical machinery and apparatus n.e.c. by 8.7%.

All change rates in this Release were calculated on the basis of trend indices.

5. INDICES OF INDUSTRIAL PRODUCTION, ACCORDING TO SELECTED NKD 2002. DIVISIONS

2000. = 100

	Original indices					
	2008.			Trend indices		
	2008.			2008.		
	VIII.	IX.	X.	VIII.	IX.	X.
11 Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying	99,3	86,7	97,6	96,2	93,9	93,7
15 Manufacture of food products and beverages	159,6	149,9	149,7	150,0	150,5	151,0
21 Manufacture of pulp, paper and paper products	141,3	161,0	155,5	152,2	151,5	150,9
22 Publishing, printing and reproduction of recorded media	281,1	266,6	253,1	277,5	272,1	267,7
23 Manufacture of coke, refined petroleum products and nuclear fuel	80,3	66,6	63,5	74,9	73,6	72,9
24 Manufacture of chemicals and chemical products	72,8	106,9	117,9	100,9	101,4	102,1
26 Manufacture of other non-metallic mineral products	153,8	175,3	184,8	154,7	158,2	162,6
28 Manufacture of fabricated metal products,	181,5	231,4	231,4	213,1	214,5	216,2

except machinery and equipment							
29 Manufacture of machinery and equipment n.e.c.		178,1	280,7	273,2	255,6	259,1	263,7
31 Manufacture of electrical machinery and apparatus n.e.c		108,0	145,7	148,7	144,6	143,5	142,7
35 Manufacture of other transport equipment		150,0	150,1	160,0	152,8	153,0	153,1
40 Electricity, gas, steam and hot water supply		117,5	120,1	117,2	127,3	126,8	125,2

6. VOLUME INDICES OF INDUSTRIAL PRODUCTION, TOTAL AND ACCORDING TO NKD 2002. SECTIONS

2000. = 100

	Total C, D and E			C Mining and quarrying			D Manufacturing			E Electricity, gas and water supply		
	Original indices	Seasonally adjusted indices	Trend indices	Original indices	Seasonally adjusted indices	Trend indices	Original indices	Seasonally adjusted indices	Trend indices	Original indices	Seasonally adjusted indices	Trend indices

2007.

IV.	136,9	138,2	139,4	132,9	130,1	131,5	141,8	142,9	144,3	109,0	112,5	113,8
V.	149,0	141,4	139,9	137,0	131,6	130,2	157,8	147,3	144,9	105,2	112,8	115,1
VI.	139,0	139,2	140,4	124,8	126,5	128,7	145,7	144,0	145,4	106,5	116,4	116,7
VII.	150,3	142,6	140,9	123,7	120,1	128,1	157,9	148,1	145,6	118,7	120,5	118,3
VIII.	137,6	140,6	141,1	130,5	128,8	129,3	141,3	144,6	145,6	116,7	121,6	119,4
IX.	140,1	140,6	141,4	141,2	136,6	130,5	144,9	144,8	145,6	110,4	117,0	120,3
X.	148,7	143,1	141,7	135,2	128,4	130,3	153,9	146,8	145,8	123,2	126,4	121,4
XI.	146,3	141,6	141,9	130,6	128,2	129,7	150,9	145,5	145,9	124,1	123,1	121,9
XII.	137,7	140,7	142,2	122,8	127,9	129,6	138,2	143,9	146,2	135,4	123,2	121,9

2008.

I.	129,9	143,9	142,6	117,1	127,9	129,9	128,5	148,0	146,8	137,7	122,8	121,7
II.	136,5	142,8	143,0	121,4	132,4	130,3	139,6	147,4	147,3	121,6	119,3	121,3
III.	144,4	144,0	143,2	130,7	129,5	130,2	148,8	148,9	147,6	122,3	118,8	121,2

IV.		146,4	143,6	143,2	131,1	128,4	130,0	152,3	148,5	147,6	116,9	119,9	121,5
V.		145,8	142,1	143,1	132,9	127,5	130,2	152,1	146,1	147,4	114,1	123,4	122,0
VI.		149,0	144,8	143,0	132,6	133,4	130,6	155,4	148,7	147,3	116,7	125,4	122,1
VII.		153,1	143,2	142,7	136,6	132,5	130,1	159,9	147,5	146,9	118,7	120,1	121,8
VIII.		131,3	140,7	142,3	130,6	128,7	128,4	133,4	144,3	146,6	117,4	122,0	121,5
IX.		144,3	141,3	142,2	123,7	120,1	126,9	150,0	145,7	146,6	117,8	122,9	121,2
X.		147,6	142,1	142,3	134,1	127,3	126,5	154,3	147,2	147,0	113,5	118,0	120,6

7. VOLUME INDICES OF INDUSTRIAL PRODUCTION, ACCORDING TO MIGs 2001

2000. = 100

Intermediate goods			Energy			Capital goods			Durable consumer goods			Non-durable consumer goods		
Original indices	Seasonally adjusted indices	Trend indices	Original indices	Seasonally adjusted indices	Trend indices	Original indices	Seasonally adjusted indices	Trend indices	Original indices	Seasonally adjusted indices	Trend indices	Original indices	Seasonally adjusted indices	Trend indices

2007.

IV.		150,1	142,3	143,5	105,7	108,8	108,9	192,0	191,2	195,6	145,1	142,7	138,7	126,1	133,7	135,9
V.		158,9	144,2	143,4	102,8	109,2	109,1	207,7	198,1	195,8	143,4	135,3	138,0	150,2	138,9	136,9
VI.		145,2	142,7	143,3	99,7	109,0	109,8	194,8	196,2	195,6	132,5	132,6	137,5	139,7	137,2	137,8
VII.		150,7	143,4	143,0	110,1	111,6	111,2	194,4	196,1	194,5	133,4	134,8	137,6	159,7	141,4	138,6

VIII.		138,9	143,3	142,4	110,6	112,6	112,1	170,3	178,1	194,0	126,9	144,3	137,7	140,9	137,9	139,3
IX.		146,8	140,7	141,6	107,7	111,7	113,4	200,2	199,9	194,9	133,9	133,4	137,4	134,5	139,1	140,0
X.		149,4	138,6	141,0	115,5	117,9	115,0	200,0	191,6	196,3	149,9	142,2	136,9	150,0	143,6	140,7
XI.		142,7	139,7	140,8	115,1	113,2	113,9	197,2	191,2	198,1	144,8	137,4	135,9	149,6	141,1	141,2
XII.		116,9	138,2	140,9	122,1	111,9	112,7	205,3	202,7	200,7	119,4	128,0	134,8	139,6	140,2	141,6

2008.

I.		116,4	142,5	141,4	125,0	113,9	112,4	186,2	203,9	203,0	121,6	128,4	134,3	123,7	143,8	142,0
II.		136,6	141,9	141,7	111,4	110,1	110,8	202,9	204,0	204,7	143,6	137,7	134,3	127,7	141,8	142,4
III.		147,7	142,9	141,8	112,6	108,8	109,7	221,2	219,5	204,9	137,9	135,2	134,2	134,7	142,6	142,8
IV.		155,6	142,0	141,6	107,3	110,5	110,9	203,6	197,1	203,1	138,6	132,4	133,7	143,3	145,0	143,1
V.		148,4	139,0	141,2	107,3	113,5	113,6	199,6	195,7	201,1	133,4	129,1	133,5	148,8	143,4	143,3
VI.		149,8	141,6	141,0	108,6	117,4	115,0	205,6	201,3	199,8	136,8	133,1	133,5	153,1	143,7	143,3
VII.		151,4	141,1	140,7	110,8	112,2	113,2	195,3	194,2	198,6	136,5	135,9	133,6	165,3	143,0	143,3
VIII.		124,7	137,6	140,3	109,1	111,1	111,3	167,4	183,8	198,6	87,0	110,1	133,3	139,8	145,5	143,2
IX.		148,7	138,5	140,4	106,1	110,3	110,0	205,8	199,8	200,9	135,7	131,4	133,0	142,9	142,0	142,9
X.		152,1	141,4	140,8	104,9	107,6	109,1	216,6	208,2	203,7	140,5	132,8	132,6	146,0	140,5	142,8

NOTES ON METHODOLOGY

Seasonal adjustment was made by using the TRAMO-SEATS method, on the monthly index series that starts with the January 1992 index for the total industry (sections C, D and E) and for selected NKD 2002.¹⁾ divisions, while for the Main Industrial Groupings, version 2001 (MIGs 2001), the series starts with January 1997 index. A trend is a series of seasonally adjusted indices from which a random component is excluded. Due to the character of the implemented seasonal adjustment method, the extension of index series, by adding of new monthly observations for each new month, may cause subsequent corrections of already published seasonally adjusted indices and trend indices for several months backwards.

Since January 2006, **new definitions have been applied for MIGs aggregations** in the calculation of aggregated indices in regard of the further harmonisation with the EU statistical standards.²⁾ In order to avoid the misunderstanding regarding the MIG version applied, in all publications of the Central Bureau of Statistics it will be marked with **MIGs 2001** instead of the currently used MIG. The arrangement at the level of the NKD 2002. groups or divisions according to the MIGs 2001 using alphabetic marks of abbreviations was done as follows:

AI Intermediate goods: divisions 13, 14, 20, 21, 25 – 27 and 37 and groups 15.6, 15.7, 17.1 – 17.3, 17.6, 24.1 – 24.3, 24.6, 24.7, 28.4 – 28.7, 31.2 – 31.6 and 32.1

AE Energy: divisions 10, 11, 23, 40 and 41

B Capital goods: divisions 30 and 34 and groups 28.1 – 28.3, 29.1 – 29.6, 31.1, 32.2, 33.1 – 33.3 and 35.1 – 35.3

CD Durable consumer goods: groups 29.7, 32.3, 33.4, 33.5, 35.4, 35.5, and 36.1 – 36.3

CN Non-durable consumer goods: divisions 16, 18, 19 and 22 and groups: 15.1 – 15.5, 15.8, 15.9, 17.4, 17.5, 17.7, 24.4, 24.5 and 36.4 – 36.6.

Comparability of series according to MIGs 2001

Indices of the total volume of industrial production calculated according to the MIG criteria were published for the first time in 1997 in the First Release No. 2.1.1.A/8 – Indices of industrial production, seasonally adjusted time-series. They were not comparable with indices of total volume of industrial production by economic purpose of products published in first releases and other publications of the Central Bureau of Statistics before 1997, due to the usage of different concepts, classifications and definitions used for their calculation (see more detailed explanations in first releases for 2005 and for previous years). Industrial production indices with the same alphabetical mark and grouping title calculated according to the MIG (“old version“) and the MIGs 2001 (“new version“) must not be combined since they are not nearly identical.

The selected NKD 2002. divisions were defined on the basis of their participation in the gross value added of industry of the Republic of Croatia. Relative amounts (division structure), with which particular industrial divisions of NKD 2002. participate in the gross value added of industry of the Republic of Croatia, are published in the First Release No. 2.1.1. Industrial production volume index, in which original indices of industrial production are published for the first time, usually issued one week before this first release.

Special notes to users

Recalculated data series according to the new definitions of MIGs 2001 are available for the period from January 1997 to December 2005. They were published in the Monthly Statistical Reports Nos. 2/2006 and 3/2006 of the Central Bureau of Statistics. Series of MIGs 2001 aggregates for years before 1997 could not be recalculated, due to the usage of different concepts, classifications and definitions in their grouping, as it has already been mentioned above. Recalculated MIGs 2001 series are also available in electronic form to all users on their personal request to the Statistical Information and Documentation, Archive and Publications Division of the Central Bureau of Statistics.

1) The National Classification of Activities – NKD 2002. (NN, No. 13/03)

2) Commission Regulation (EC) No. 586/2001 of 26 March 2001 on Implementing Council Regulation (EC) No. 1165/98 concerning short-term statistics as regards the definition of Main Industrial Groupings (MIG)

Abbreviations

n.e.c.	not elsewhere classified
CBS	Central Bureau of Statistics
MIG	Main Industrial Groupings, first version
MIGs 2001	Main Industrial Groupings, 2001 version
NKD 2002.	National Classification of Activities, 2002 version
NN	Narodne novine, official gazette of the Republic of Croatia