Field Manufacturing

Change of responsibility for, and revision and rollover, of *Steel Manufacturing* unit standards and qualification

Unit Standards		
Subfield	Domain	ID
Steel Manufacturing	Steel Making	9278-9289, 11079
	Steel Manufacturing –	14536, 17916, 17917
	Cold Working and Forming	
	Steel Manufacturing – Iron	14484-14488, 15613-15616
	Making	
	Steel Manufacturing –	9276, 9277, 9292
	Raw Materials	
	Steel Manufacturing –	8323-8334, 9290, 9291
	Supporting Skills	
	Steel Product Handling	9272-9275, 14482, 14483,
		14529-14535

Qualification	
Qualification Title	Reference
National Certificate in Steel Manufacturing (Level 3) with strands in	0314
Electric Arc Furnace (EAF) and Oxygen Bodenblasten Maxhutte	
Process (OBM)	

Responsibility for the unit standards and qualification listed above has been transferred from NZQA to Competenz, who has completed the revision and rollover of the unit standards and qualification listed above. The unit standards were rolled over to maintain their currency until they are reviewed.

Date new versions published

March 2012

Planned review date

December 2012

Summary

In 2002, the New Zealand Qualifications Authority (NZQA) took stock of the qualifications and unit standards it is responsible for developing. A prioritisation and rationalisation exercise carried out by National Qualifications Services (NQS) in September 2002 aimed at rationalising the work of NZQA to ensure that the unit standards and qualifications for which NQS was responsible were relevant, useful, and met the current needs of learners, providers, the community, and government. Careful consideration was given to the process to ensure that the unit standards retained by NQS reflected its responsibilities in relation to the Industry Training Act 1992, and national priorities including those expressed in the Tertiary Education Strategy and Statement of Tertiary Education Priorities (STEPs).

The decision was made for NQS to exit from standard setting responsibilities in the Steel Manufacturing national qualification and unit standards. Competenz indicated that they would assume standard-setting responsibility.

The Steel Manufacturing unit standards and qualification will be reviewed in 2012 as part of the mandatory review process for this sector.

Revision and rollover of Steel Manufacturing unit standards

Main changes

- Standard Setting Body details were updated to reflect the change of standard setting responsibility.
- Unit standards were updated to reflect current technical criteria and industry references; and align the purpose statements to outcomes.
- Titles for unit standards 8326, 8328, 9290 and 14486 were changed.
- A last date for assessment of superseded versions of the unit standards was set of 31 December 2012.

Impact on Consent and Moderation Requirements (CMR)

The standards were moved from CMR 0122 to CMR 0013.

Impact on registered qualifications

Key to type of impact	
Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set
The qualification lists a standard that has changes to level or credits	
	The qualification lists a C or D category standard
Not materially affected	The qualification lists a standard that has a new title
	The qualification lists a standard that has a new classification

The following Competenz qualification is not materially affected by the outcome of this revision and has been updated as part of this revision (see details below).

Ref	Qualification Title	ID
	National Certificate in Steel Manufacturing (Level 3) with strands in Electric Arc Furnace (EAF) and Oxygen Bodenblasten Maxhutte Process (OBM)	8328

Detailed list of unit standards - classification, title, level, and credits

ID	Title	Level	Credit
9278	Prepare iron stock for steelmaking by the oxygen blowing	3	12
	machine process		
9279	Control oxygen blowing machine process parameters and	4	30
	operation from a control room		
9280	Carry out oxygen blowing machine (OBM) floor operations	3	12
9281	Prepare scrap iron charge for steelmaking	3	10
9282	Control arc furnace process parameters and operation	4	40
	from a control room		
9283	Carry out arc furnace floor operations	3	12
9284	Refine steel by the ladle treatment process	4	40
9285	Control steel casting process parameters from a control	4	30
	room		
9286	Control steel casting operation on the floor	4	30
9287	Carry out steel casting operations on the floor	2	14
	Carry out a steel casting operation on the floor		

Manufacturing > Steel Manufacturing > Steel Making

ID	Title	Level	Credit
9288	Cut off and discharge rolled slabs or billets	2	10
9289	Rectify steel slab surface for rolling	3	20
11079	Prepare and inspect ladles for steel casting	3	35

Manufacturing > Steel Manufacturing > Steel Manufacturing - Cold Working and Forming

ID	Title	Level	Credit
14536	Roll form roofing and cladding products from steel coil	4	20
17916	Fold metal to form roofing and cladding accessories	3	20
17917	Roll form metal building products from coated and	4	20
	uncoated coil		

Manufacturing > Steel Manufacturing > Steel Manufacturing – Iron Making Manufacturing > Steel Manufacturing > Steel Product Handling

ID	Title	Level	Credit
14484	Prepare raw materials for iron making	3	20
14485	Control automated multihearth furnace and kiln processes	4	30
14486	Monitor and control kilns, multihearth furnaces	4	30
	Monitor and control kilns and multihearth furnaces		
14487	Monitor and adjust iron making kilns	3	20
14488	Discharge iron making kiln products	3	20
15613	Control iron melting process parameters from a control	4	20
	room		
15614	Control iron melting operations on the floor	4	24
15615	Tap molten iron and molten slag	3	15
15616	Control molten iron and slag tapping operations on the	3	6
	floor		

Manufacturing > Steel Manufacturing > Steel Manufacturing – Raw Materials

ID	Title	Level	Credit
9276	Shred scrap metal	3	24
9277	Sort and pack non-ferrous materials	2	16
9292	Control stock in scrap yards	3	32

Manufacturing > Steel Manufacturing > Steel Manufacturing – Supporting Skills

ID	Title	Level	Credit
8323	Demonstrate knowledge of electric arc furnace steelmaking	3	4
8324	Demonstrate knowledge of ladle furnace steelmaking	3	4
8325	Demonstrate knowledge of continuous casting of steel	3	4
8326	Demonstrate knowledge of basic oxygen furnace steelmaking Demonstrate knowledge of oxygen furnace steelmaking	3	4
8327	Demonstrate knowledge of scrap metal and its preparation for steelmaking	2	4
8328	Demonstrate knowledge of the steel industry and its products Describe the steel industry and its products	1	2
8329	Demonstrate knowledge of cold working and forming of steel	3	6

ID	Title	Level	Credit
8330	Demonstrate knowledge of ironsand and its mining	3	6
8331	Demonstrate knowledge of the manufacture of direct reduced iron	3	4
8332	Demonstrate knowledge of ironmaking melters	3	4
8333	Demonstrate knowledge of hot rolling of steel	3	4
8334	Demonstrate knowledge of the coating of steel products	3	4
9290	Schedule a production process Schedule a production process for steel manufacturing	4	30
9291	Mechanically test metals	3	12

Manufacturing > Steel Manufacturing > Steel Product Handling

ID	Title	Level	Credit
9272	Maintain metal transfer for casting using an overhead	4	18
	crane		
9273	Charge scrap to the electric arc furnace using an overhead	3	12
	crane		
9274	Maintain metal transfer for steelmaking using an overhead	4	22
	crane		
9275	Support casting operations using an overhead crane	3	12
14482	Use flame cutting equipment to cut mild steel	2	2
14483	Use plasma arc cutting equipment to cut mild steel	2	2
14529	Level steel plate	2	5
14530	Join steel coils into a continuous strip	4	18
14531	Uncoil steel coils	3	8
14532	Slit steel coils	3	8
14533	Pack bulk steel products	2	4
14534	Despatch bulk steel products	4	24
14535	Control stocks of semi finished steel forms	2	4

Revision of Steel Manufacturing Qualification

National Certificate in Steel Manufacturing (Level 3) with strands in Electric Arc Furnance (EAF) and Oxygen Bodenblasten Maxhutte Process (OBM) [Ref: 0314]

Main changes

- Standard setting body details have been amended.
- The total credit value has been reduced from 96 to 94.
- The credit value for standard 2683 has been updated.
- Updated title change for unit standard 8328.

Transition

Version 2 was issued following a change of responsibility from the New Zealand Qualifications Authority to Competenz and existing trainees are not affected by this revision.

It is not intended that anyone is disadvantaged by this revision. However, anyone who feels they have been disadvantaged may appeal to the standard setting body at the address below.

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