

Field Manufacturing**Review of *Extrusion* unit standards**

Subfield	Domain	ID
Plastics Processing Technology	Extrusion	281-286, 9715

The Plastics and Materials Processing Industry Training Organisation (PaMPITO) has completed the review of the unit standards listed above.

Date new versions published

September 2011

Planned review date

December 2016

Summary

In June 2011, PaMPITO carried out a review of these unit standards which had passed their planned review date. Members of the review group were emailed the unit standards in order to submit feedback which was then discussed in a one day meeting. The review group was made up of industry representatives including PaMPITO field staff and representatives from three organisations who carry out plastic extrusion processes. The review group also included a roving assessor who has extensive practical experience in extrusion. The purpose of the review was to ensure the unit standards are relevant, logical, fit for purpose and continue to reflect the requirements of the sector.

Consideration was given to technology and equipment advancements, industry best practice and requirements, changes in legislation and issues raised regarding ease of assessment. As a result of this, two new unit standards were developed at Levels 3 and 4. Wider consultation was carried out by email with two organisations from the extrusion sector that were not in the initial review group and suggested changes were discussed and incorporated where appropriate. All changes to these unit standards have been endorsed by the review group.

Main changes

- Unit standard 284 was designated category C as the two outcomes were split into two new unit standards to reflect the difference in complexity.
- New Level 3 unit standard 27631 was created taking Outcome 1 from unit standard 284 and Outcome 3 from unit standard 282.
- New Level 4 unit standard 27571 was created as the skills of trialling an extrusion product or process in expiring unit standard 284 were deemed to be at a higher level of complexity and warranted their own unit standard.
- New Outcome 3 was added to unit standard 282 to include knowledge about the consequences of not applying quality procedures during the extrusion process and actions to be taken.
- Outcomes and evidence requirements were rewritten to clarify assessment requirements, and put into a logical order.
- Range statements were amended to improve assessment guidance.
- A last date of assessment for superseded versions of standards was specified. This date is 31 December 2014.

The category C unit standard will expire at the end of December 2014.

Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Subfield	Plastics Processing Technology	3	Standard	27571	4
Domain	Extrusion	3	Standard	27571	4

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 Plastics and Materials Processing Industry Training Organisation qualifications are impacted by the outcome of this review and will be updated when they are reviewed in 2014. The standard that generated the status *Affected* is listed in **bold**.

Ref	Qualification Title	Classification or ID
0394	National Certificate in Plastics Processing Technology (Technical) (Level 2) with strands in Injection Moulding, Extrusion, Blow Moulding, Pressure Thermoforming, Vacuum Thermoforming, Blown Film Extrusion, Film Conversion, Injection Stretch-Blow Moulding, Rotational Moulding, Film Slitting, and Expanded Polystyrene Moulding	283
0395	National Certificate in Plastics Processing Technology (Technical) (Level 3) with strands in Injection Moulding, Extrusion, Blow Moulding, Pressure Thermoforming, Vacuum Thermoforming, Blown Film Extrusion, Film Conversion, Injection Stretch-Blow Moulding, Rotational Moulding, and Expanded Polystyrene Moulding	284 , 286
0396	National Certificate in Plastics Processing Technology (Technical) (Level 4) with strands in Injection Moulding, Extrusion, Blow Moulding, Thermoforming, Blown Film Extrusion, Injection Stretch-Blow Moulding Single Stage, Injection Stretch-Blow Moulding Two Stage, and Rotational Moulding	9715
0566	National Certificate in Cabling (Level 2) with strands in Wire Drawing, Conductor Assembly, Extrusion, Cable Assembly, and Cable Testing	283, 284
0738	National Certificate in Cabling (Level 3) with strands in Wire Drawing, Conductor Assembly, Extrusion, Cable Assembly, and Cable Testing	283, 284 , 286

1362	National Certificate in Plastics Processing Technology (Production) (Level 2) with strands in General, Injection Moulding, Extrusion, Blow Moulding, Pressure Thermoforming, Vacuum Thermoforming, Blown Film Extrusion, Film Conversion, Injection Stretch-Blow Moulding, Rotational Moulding, Expanded Polystyrene Moulding, and Polystyrene Pre-expansion	283
1407	National Certificate in Engineering and Technology (Plastics Engineering) (Level 4) with strands in Injection Moulding, Extrusion, Blow Moulding, Pressure Thermoforming, Vacuum Thermoforming, Blown Film Extrusion, Film Conversion, Injection Stretch-Blow Moulding, and Rotational Moulding	283

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

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Manufacturing > Plastics Processing Technology > Extrusion

ID	Title	Level	Credit	Review Category
281	Perform basic extrusion process operations	1	4	B
282	Operate the extrusion machine	2	8	B
283	Run and monitor the extrusion production process Run and control the extrusion production process	2	12	B
284	Control and optimise the extrusion production process	3	8	C
27571	Trial an extrusion product or process on a specified extrusion line	4	12	
27631	Optimise the extrusion process and operate an extrusion process for complex products	3	8	
285	Change dies and set ancillary equipment for extrusion	2	10	B
286	Demonstrate knowledge of extrusion tooling and change extruder screws Demonstrate knowledge of advanced extrusion tooling and change extruder screws	3	6	B
9715	Maintain extrusion tooling and demonstrate knowledge of tooling design principles Prepare extrusion dies and calibrators for production and demonstrate knowledge of their design principles	4	7	B