Title	**Perform calculations for marine paint systems**		
Level	**4**	**Credits**	**5**

Purpose	People credited with this unit standard are able to: explain and calculate measurement of solids in marine paint; calculate film thicknesses of marine paints; describe paint curing considerations and calculate curing times.

Classification	Boating Industries > Boatbuilding

Available grade	Achieved

Guidance Information

1 All work practices must meet recognised codes of practice and documented workplace policies and procedures (where these exceed code) for personal, product, and workplace health and safety, and must meet the obligations required under the Health and Safety at Work Act 2015 and Resource Management Act 1991, and any subsequent amendments.

2 Definitions
Dew point is the surface temperature at which the air can no longer hold its water vapour and a percentage of the moisture starts to form in water droplets on the surface to be painted.
Job specifications refer to the standard requirements of the job being undertaken.

Outcomes and performance criteria

Outcome 1

Explain and calculate measurement of solids in marine paint.

Performance criteria

1.1 Solids in marine paint are explained as a percentage of the total weight solids.

1.2 Solids in marine paint are explained as a percentage of the total volume solids.

1.3 Typical thinner quantity addition to paint is calculated in accordance with job specifications.

1.4 Effect of thinning on paint volume and solids is calculated in accordance with job specifications.

Outcome 2

Calculate film thicknesses of marine paints.

Performance criteria

2.1 Dry film thickness is calculated from wet film thickness in accordance with paint specifications.

Outcome 3

Describe paint curing considerations and calculate curing times.

Performance criteria

3.1 Dew point is described in terms of the effect on marine paint curing.

3.2 Relative humidity and its measurement are described in the context of marine paint curing.

3.3 Curing times are calculated according to job specifications and temperature.

Planned review date	31 December 2023

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	14 December 2007	31 December 2020
Review	2	30 August 2018	N/A

Consent and Moderation Requirements (CMR) reference	0136

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact the NZ Marine and Composites ITO training@nzmarine.com if you wish to suggest changes to the content of this unit standard.