

EC CERTIFICATE OF QUALITY SYSTEM APPROVAL

In accordance with the requirements of the Pressure Equipment Directive 2014/68/EU and the Pressure Equipment (Safety) Regulations 2016, UK Statutory Instrument 2016 No. 1105

This is to certify that the Quality Management System of:

**Miilucast Oy
Merikatu 7, FI-92100 Raahe
Finland**

has been assessed against the requirements of Annex I, paragraph 4.3 of the Pressure Equipment Directive 2014/68/EU, and Schedule 1, paragraph 4.3 of The Pressure Equipment (Safety) Regulations 2016 and conforms to the requirements for the products shown below:

Manufacture of Steel Castings including High Alloy Steel Grades

Approval is subject to the continued maintenance of the quality system in accordance with the requirements of the above Directive and Regulations, and continuing to comply with the Lloyd's Register Quality Assurance Certificate No. HEQ0005715.

Products are as listed on the attached schedule.

Certificate No: 0038/PED/HEL1403522/A

Original Approval: 07 January 2015

Current Certificate: 07 January 2018

Certificate Expiry: 06 January 2021

LRV Notified Body Number 0038



S. M. Williams on behalf of Lloyd's Register Verification

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EC CERTIFICATE OF QUALITY SYSTEM APPROVAL CERTIFICATE 0038/PED/HEL1403522/A SCHEDULE

Miilucast Oy
Merikatu 7, FI-92100 Raahe
Finland

SHAPE OF PRODUCT	SCH/THK	SPECIFICATION		SHAPE OF BASE MATERIAL
EN 10213	+N t ≤ 100 mm	GP 240 GH	1.0619	Cast
EN 10213	+N t ≤ 100 mm	GP 280 GH	1.0625	Cast
EN 10213	+QT2 t ≤ 150 mm	G24Mn6	1.1118	Cast
EN 10213	+QT t ≤ 50 mm	G 17 Mn 5	1.1131	Cast
EN 10213	+QT1/+QT2 t ≤ 300 mm	GX 8 CrNi 12	1.4107	Cast
EN 10213	+AT t ≤ 150 mm	GX 5 CrNi 19-10	1.4308	Cast
EN 10213	+AT t ≤ 150 mm	GX 2 CrNi 19 11	1.4309	Cast
EN 10213	+QT t ≤ 300 mm	GX 4 CrNi 13-4	1.4317	Cast
EN 10213	+QT t ≤ 300 mm	GX 4 CrNiMo 16-5-1	1.4405	Cast
EN 10213	+AT t ≤ 150 mm	GX 5 CrNiMo 19-11-2	1.4408	Cast
EN 10213	+AT t ≤ 150 mm	GX 2 CrNiMo 19 11 2	1.4409	Cast
EN 10213	+AT t ≤ 150 mm	GX 2 CrNiMoN 25-7-3	1.4417	Cast
EN 10213	+AT t ≤ 150 mm	GX 2 NiCrMo 28 20 2	1.4458	Cast
EN 10213	+AT t ≤ 150 mm	GX 2 CrNiMoN 26 7 4	1.4469	Cast
EN 10213	+AT t ≤ 150 mm	GX 2 CrNiMoN 22 5 3	1.4470	Cast
EN 10213	+AT t ≤ 150 mm	GX 2 CrNiMoCuN 25 6 3 3	1.4517	Cast
EN 10213	+AT t ≤ 150 mm	GX 5 CrNiNb 19-11	1.4552	Cast
EN 10213	+AT t ≤ 150 mm	GX 5 CrNiMoNb 19-11-2	1.4581	Cast
EN 10213	- t ≤ 150 mm	GX10NiCrSiNb32-20	1.4859	Cast
EN 10213	+QT t ≤ 150 mm	GX 23 CrMoV 12 1	1.4931	Cast
EN 10213	+QT t ≤ 200 mm	GX12CrMoVNbN9-1	1.4955	Cast
EN 10213	+QT t ≤ 100 mm	G 20 Mo 5	1.5419	Cast
EN 10213	+QT3 t ≤ 100 mm	G 18 Mo 5	1.5422	Cast
EN 10213	+QT t ≤ 35 mm	G 9 Ni 10	1.5636	Cast
EN 10213	+QT t ≤ 35 mm	G 9 Ni 14	1.5638	Cast
EN 10213	+N t ≤ 30 mm, +QT t ≤ 100 mm	G20Mn5	1.6220	Cast
EN 10213	+QT t ≤ 200 mm	G 17 NiCrMo 13 6	1.6781	Cast
EN 10213	+QT t ≤ 300 mm	GX 3 CrNi 13 4	1.6982	Cast
EN 10213	+QT t ≤ 100 mm	G 17 CrMo 5 5	1.7357	Cast
EN 10213	+QT t ≤ 150 mm	GX 15 CrMo 5	1.7365	Cast
EN 10213	+QT t ≤ 150 mm	G 17 CrMo 9 10	1.7379	Cast
EN 10213	+QT t ≤ 150 mm	G 17 CrMoV 5 10	1.7706	Cast
EN 10213	+QT t ≤ 100 mm	G 12 MoCrV 5 2	1.7720	Cast
CUSTOMER SPECIFIED PMA TO MEET PED REQUIREMENTS FOR STEEL GRADES				
ASTM A995	+AT t ≤ 150 mm	1B	PED/PMA	Cast
ASTM A995	+AT t ≤ 150 mm	3A	PED/PMA	Cast

CUSTOMER SPECIFIED PMA TO MEET PED REQUIREMENTS FOR STEEL GRADES				
ASTM A995	+AT t ≤ 150 mm	4A	PED/PMA	Cast
ASTM A995	+AT t ≤ 150 mm	5A	PED/PMA	Cast
ASTM A217	+NT t ≤ 150 mm	C12	PED/PMA	Cast
ASTM A217	+NT t ≤ 150 mm	C12A	PED/PMA	Cast
ASTM A217	+NT t ≤ 150 mm	C5	PED/PMA	Cast
ASTM A217	+NT t ≤ 150 mm	CA15	PED/PMA	Cast
ASTM A352	+QT t ≤ 300 mm	CA6NM	PED/PMA	Cast
ASTM A747	+AT t ≤ 150 mm	CB7Cu2	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CF10	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CF3	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CF3M	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CF8	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CF8C	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CF8M	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CG3M	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CG8M	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CK3MCuN	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CN3MN	PED/PMA	Cast
ASTM A351	+AT t ≤ 150 mm	CN7M	PED/PMA	Cast
ASTM A494	+AT t ≤ 150 mm	CU5MCuC	PED/PMA	Cast
ASTM A494	+AT t ≤ 150 mm	CW2M	PED/PMA	Cast
ASTM A494	+AT t ≤ 150 mm	CW6M	PED/PMA	Cast
ASTM A494	+AT t ≤ 150 mm	CW6MC	PED/PMA	Cast
ASTM A494	+AT t ≤ 150 mm	CW12MW	PED/PMA	Cast
ASTM A494	+AT t ≤ 150 mm	CY40	PED/PMA	Cast
ASTM A352	+QT t ≤ 100 mm	LC1	PED/PMA	Cast
ASTM A352	+QT t ≤ 100 mm	LC2	PED/PMA	Cast
ASTM A352	+QT t ≤ 100 mm	LC3	PED/PMA	Cast
ASTM A352	+QT t ≤ 100 mm	LCA	PED/PMA	Cast
ASTM A352	+QT t ≤ 100 mm	LCB	PED/PMA	Cast
ASTM A352	+QT t ≤ 100 mm	LCC	PED/PMA	Cast
ASTM A217	+QT t ≤ 150 mm	WC6	PED/PMA	Cast
ASTM A217	+QT t ≤ 150 mm	WC9	PED/PMA	Cast
ASTM A216	+N t ≤ 100 mm	WCA	PED/PMA	Cast
ASTM A216	+N t ≤ 100 mm	WCB	PED/PMA	Cast
ASTM A216	+N t ≤ 100 mm	WCC	PED/PMA	Cast
SS 142324	+AT t ≤ 150 mm	2324	PED/PMA	Cast

Schedule Issue: 02

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