

# Repair & Maintenance range

LARGER THAN EVER BEFORE



# The R&M naming structure

ESAB has revised the consumables range available for repair and maintenance, and also amended the names to facilitate selection and decision making.

## Naming structure for electrodes:

OK Weartrode "HRC"	For abrasion (metal/metal wear)
OK Tooltrode "HRC"	For tool steels
OK 13Mn & 14MnNi	For Mn steels
OK "AWS class"	Cast iron range
OK GPC	Gouging, piercing and cutting

Abbreviation HD stands for high deposition rate. This is used to differentiate between same name MMA products.



## Naming structure for FCAW, MIG/MAG and SAW

Solid wire OK Autrodur "HRC" X Y  
Cored wire: OK Tubrodur "HRC" X Y

Letter X represents the process:

G:	Gas shielded
O:	Open arc
S:	Submerged arc

Letter Y represents the application: (or chemistry when more relevant)

M:	Metal/Metal
A:	Abrasion
D:	Dissimilar
T	High temperature

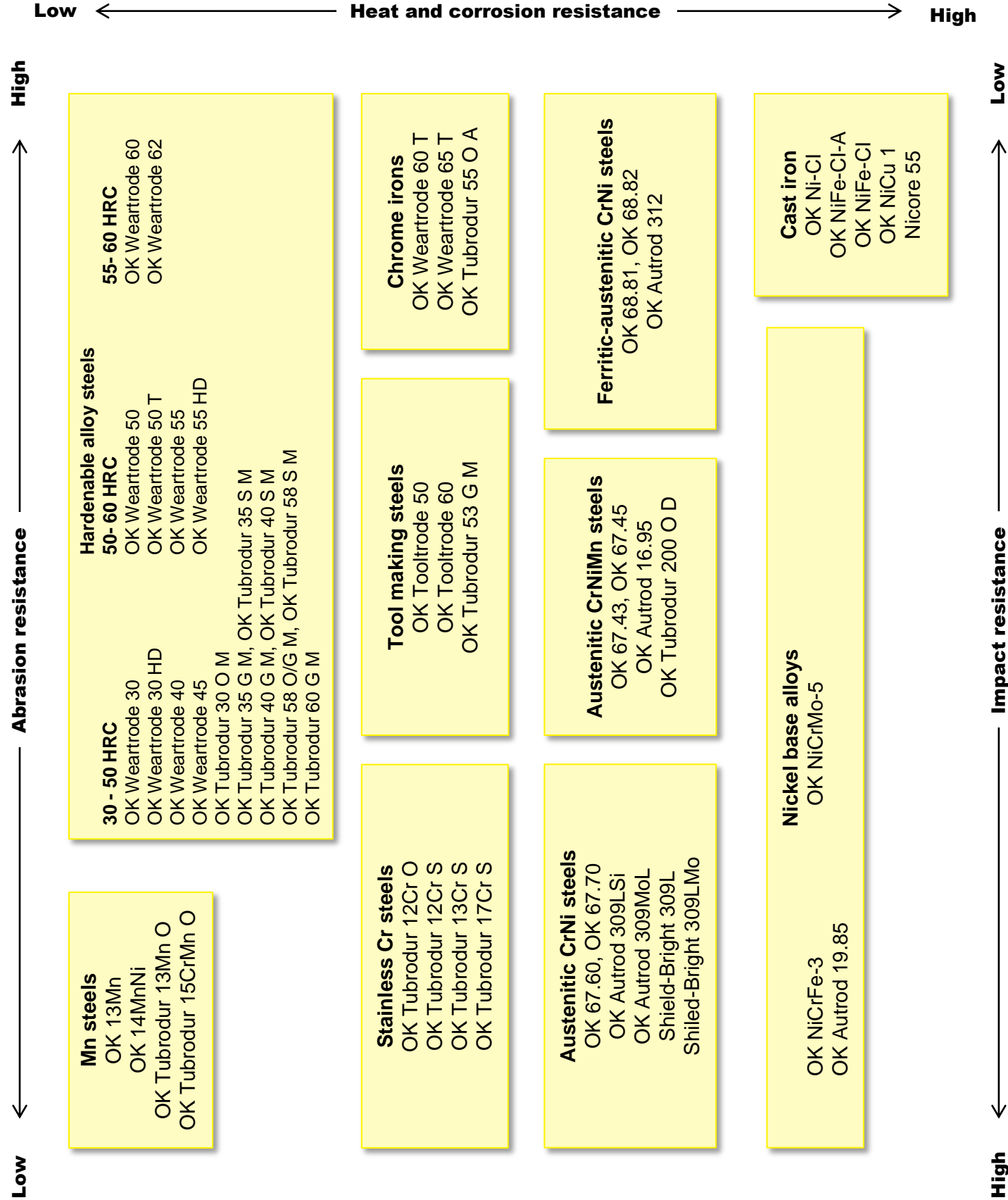
## R&M Industries

- Railway repair
- Agriculture
- Forestry
- Mining
- Earth & rock drills
- Extruder screws
- Scraper blades

## Selection table

Product name	Classification	Mn steels surfacing	Metal/Metal	Mineral Abrasion	Abrasion + pressure	Impact	High temp.	Corrosion	Gouging	Cast iron	Cu alloys	Al alloys	Machinability	Hardness
OK Weartrode 30	E Z Fe1		x										Good	> 30 HRC
OK Weartrode 30 HD	E Fe1		x										Good	> 30 HRC
OK Weartrode 35	E Fe1		x	(x)									Good	35 HRC
OK Weartrode 40	E Z Fe2		x			x	≤ 400°C						Grinding only	45 HRC
OK Weartrode 45	E Z Fe3		x										Grinding only	43 HRC
OK Weartrode 50	E Z Fe2			x									Grinding only	50 HRC
OK Weartrode 50 T	E Z Fe8		x		x	x	≤ 400°C	x					Grinding only	45 HRC
OK Weartrode 55	E Z Fe3		x	x			(x)						Grinding only	57 HRC
OK Weartrode 55 HD	E Z Fe6		x	x			(x)						Grinding only	57 HRC
OK Weartrode 60	E Z Fe2			x			(x)						Grinding only	60 HRC
OK Weartrode 60 T	E Z Fe14			x			x	x					Grinding only	60 HRC
OK Weartrode 62	N.A.			x		(x)							Grinding only	61 HRC
OK Weartrode 65 T	E Fe16			x			≤ 700°C	x					Grinding only	65 HRC
OK Tooltrode 50	E Z Fe3		x		x	x	≤ 550°C						Grinding only	50 HRC
OK Tooltrode 60	E Fe4		x		x	x	≤ 550°C						Grinding only	60 HRC
OK 13Mn	E Fe9	x	x			x							Grinding	46 HRC*
OK 14MnNi	E Z Fe9	x	x			x							Grinding	44 HRC*
OK GPC	N.A.								x				N.A.	N.A.
OK Ni-CI	ENi-CI									x			Good	130- 170HB
OK NiFe-CI-A	ENi-CI-A									x			Good	160- 200HB
OK NiFe-CI	ENiFe-CI									x			Good	180- 200HB
OK NiCu 1	E NiCu 1									x			Good	140- 160HB
OK 94.25	EL-CuSn7										x			
OK 94.35	EL-CuNi30Mn										x			
OK 92.20	AlMn1											x		
OK 96.40	AlSi5											x		
OK 96.50	AlSi12											x		
OK Tubrodur 55 O A	T Z Fe14			x			x	x					Grinding only	52 HRC
OK Tubrodur 200 O D	T Fe10	x	x											200HB
OK Tubrodur 30 O M	T Z Fe1		x											33 HRC
OK Tubrodur 35 G M	T Fe1		x											36 HRC
OK Tubrodur 35 S M	T Fe1		x											36 HRC
OK Tubrodur 35 O M	T Z Fe3		x		x	x								35 HRC
OK Tubrodur 40 O M	T Z Fe2		x		x	x								40 HRC
OK Tubrodur 40 S M	T Fe1		x		x	x								40 HRC
OK Tubrodur 53 G M	T Fe3		x		x			x					Grinding only	53 HRC
OK Tubrodur 58 O/G M	T Fe6		x	x									Grinding only	58 HRC
OK Tubrodur 58 S M	T Fe6		x	x									Grinding only	58 HRC
OK Tubrodur 60 G M	T Fe9				x								Grinding only	60 HRC
OK Tubrodur 13Mn O/G	T Fe9	x	x			x							Grinding	45 HRC*
OK Tubrodur 15CrMn O/G	T Fe9	x	x			x							Grinding	45 HRC*
OK Tubrodur 12Cr S	T Fe7		x				≤ 600°C	x						
OK Tubrodur 13Cr G	T Z Fe7		x				≤ 600°C	x						46 HRC
OK Tubrodur 13Cr S	T Fe7		x				≤ 600°C	x						46 HRC
OK Tubrodur 23Cr S	T Fe7						x	x						40 HRC
Nicore 55										x				
OK Autrodur 30 GM	S Fe1		x										Good	30 HRC
OK Autrodur 38 G M	S Fe2		x			x							Fair	38 HRC
OK Autrodur 56 G M	S Fe8		x	x									Grinding only	56 HRC
OK Autrodur 58 G M	S Z Fe8		x	x		x							Grinding only	58 HRC

\* In work-hardened condition



## R&M range MMA

Description	Previous description	GIN	Weight per package (kg)	Weight per carton CT (kg)	Minimum order quantity MOQ (kg)
OK GPC 2.5x350mm	OK 21.03	2103253030	1.5	9.0	9.0
OK GPC 3.2x350mm	OK 21.03	2103323020	3.5	10.5	10.5
OK GPC 4.0x350mm	OK 21.03	2103403020	3.3	9.9	9.9
OK GPC 5.0x450mm	OK 21.03	2103504020	4.3	12.9	12.9
OK GPC 6.0x450mm	OK 21.03	2103604020	4.4	13.2	**
OK Weartrode 30 2.5x350mm	OK 83.28	8328253030	1.8	10.8	10.8
OK Weartrode 30 3.2x450mm	OK 83.28	8328324030	2.5	15.0	15.0
OK Weartrode 30 4.0x450mm	OK 83.28	8328404020	5.7	17.1	17.1
OK Weartrode 30 5.0x450mm	OK 83.28	8328504020	5.8	17.4	17.4
OK Weartrode 30 6.0x450mm	OK 83.28	8328604020	5.7	17.1	17.1
OK Weartrode 30 3.2x450 ½ VP	OK 83.28	83283240G0	2.5	15.0	15.0
OK Weartrode 30 4.0x450 ½ VP	OK 83.28	83284040G0	2.5	15.0	15.0
OK Weartrode 30 5.0x450 ¾ VP	OK83.28	83285040V0	4.3	17.2	17.2
OK Weartrode 30 HD 3.2x450mm	OK 83.29	8329324030	2.4	14.4	14.4
OK Weartrode 30 HD 4.0x450mm	OK 83.29	8329404020	5.8	17.4	17.4
OK Weartrode 30 HD 5.0x450mm	OK 83.29	8329504020	5.5	16.5	16.5
OK Weartrode 35 3.2x450mm	E-B 502	8012324030 *	2.8	16.8	**
OK Weartrode 35 4.0x450mm	E-B 502	8012404020 *	6.0	18.0	**
OK Weartrode 35 5.0x450mm	E-B 502	8012504020 *	6.2	18.6	18.6
OK Weartrode 40 2.5x350mm	E-B 503	8013253030 *	1.9	11.4	**
OK Weartrode 40 3.2x450mm	E-B 503	8013324030 *	3.0	18.0	18.0
OK Weartrode 40 4.0x450mm	E-B 503	8013404020 *	5.5	16.5	16.5
OK Weartrode 40 5.0x450mm	E-B 503	8013504020 *	5.8	17.4	17.4
OK Weartrode 45 3.2x450mm	EN 450B	8014324020 *	5.4	16.2	16.2
OK Weartrode 45 4.0x450mm	EN 450B	8014404020 *	5.4	16.2	16.2
OK Weartrode 45 5.0x450mm	EN 450B	8014504020 *	5.6	16.8	16.8
OK Weartrode 50 3.2x350mm	OK 83.50	8350323030	1.8	10.8	10.8
OK Weartrode 50 4.0x450mm	OK 83.50	8350404020	4.6	13.8	13.8
OK Weartrode 50 5.0x450mm	OK 83.50	8350504020	4.7	14.1	14.1
OK Weartrode 50 2.5x350mm	OK 83.50	8350253030	1.8	10.8	10.8
OK Weartrode 50 T 2.0x300mm	E-B 511	8016202030 *	1.6	9.6	**
OK Weartrode 50 T 2.5x350mm	E-B 511	8016253030 *	1.8	10.8	10.8
OK Weartrode 50 T 3.2x450mm	E-B 511	8016324030 *	2.3	13.8	13.9
OK Weartrode 50 T 4.0x450mm	E-B 511	8016404020 *	5.9	17.7	17.7
OK Weartrode 50 T 5.0x450mm	E-B 511	8016504020 *	5.6	16.8	16.8
OK Weartrode 55 3.2x450mm	EN 600B	8017324020 *	5.3	15.9	15.9
OK Weartrode 55 4.0x450mm	EN 600B	8017404020 *	5.2	15.6	15.6
OK Weartrode 55 5.0x450mm	EN 600B	8017504020 *	5.6	16.8	16.8
OK Weartrode 55 6.0x450mm	EN 600B	8017604020 *	5.5	16.5	16.5
OK Weartrode 55 HD 2.5x350mm	OK 84.58	8458253030	1.8	10.8	10.8
OK Weartrode 55 HD 3.2x450mm	OK 84.58	8458324030	2.4	14.4	14.4
OK Weartrode 55 HD 4.0x450mm	OK 84.58	8458404020	5.0	15.0	15.0
OK Weartrode 55 HD 5.0x450mm	OK 84.58	8458504020	5.0	15.0	15.0
OK Weartrode 60 3.2x450mm	OK 83.65	8365324030	2.6	15.6	15.6
OK Weartrode 60 4.0x450mm	OK 83.65	8365404020	5.6	16.8	16.8

\* New GIN

\*\* Multiple cartons are required to order. Please contact your ESAB representative

## R&M range MMA

Description	Previous description	GIN	Weight per package (kg)	Weight per carton CT (kg)	Minimum order quantity MOQ (kg)
OK Weartrode 60 T 2.5x350mm	OK 84.78	8478253030	1.8	10.8	10.8
OK Weartrode 60 T 3.2x350mm	OK 84.78	8478323030	1.7	10.2	10.2
OK Weartrode 60 T 4.0x450mm	OK 84.78	8478404020	5.0	15.0	15.0
OK Weartrode 60 T 5.0x450mm	OK 84.78	8478504020	4.8	14.4	14.4
OK Weartrode 62 2.5x350mm	OK 84.84	8484253030	1.9	11.4	11.4
OK Weartrode 62 3.2x350mm	OK 84.84	8484323030	1.9	11.4	11.4
OK Weartrode 62 4.0x350mm	OK 84.84	8484403020	4.2	12.6	12.6
OK Weartrode 65 T 3.2x350mm	OK 84.80	8480323030	1.9	11.4	11.4
OK Weartrode 65 T 4.0x350mm	OK 84.80	8480403020	3.7	11.1	11.1
OK Tooltrode 50 2.5x350mm	OK 85.58	8558253030	2.0	12.0	72.0
OK Tooltrode 50 3.2x350mm	OK 85.58	8558323030	1.9	11.4	11.4
OK Tooltrode 50 4.0x350mm	OK 85.58	8558403020	4.4	13.2	13.2
OK Tooltrode 50 5.0x350mm	OK 85.58	8558503020	4.4	13.2	13.2
OK Tooltrode 60 2.5x350mm	OK 85.65	8565253030	1.8	10.8	10.8
OK Tooltrode 60 3.2x350mm	OK 85.65	8565323030	1.7	10.2	10.2
OK Tooltrode 60 4.0x350mm	OK 85.65	8565403020	3.8	11.4	**
OK 13Mn 3.2x450mm	OK 86.08	8608324030	2.4	14.4	14.4
OK 13Mn 4.0x450mm	OK 86.08	8608404020	5.9	17.7	17.7
OK 13Mn 5.0x450mm	OK 86.08	8608504020	5.5	16.5	16.5
OK 14MnNi 3.2x450mm	OK 86.28	8628324030	2.2	13.2	13.2
OK 14MnNi 4.0x450mm	OK 86.28	8628404020	5.0	15.0	15.0
OK 14MnNi 5.0x450mm	OK 86.28	8628504020	5.0	15.0	30.0
OK Ni-CI 2.5x300mm ¼ VP	OK 92.18	92182520L0	0.7	4.2	4.2
OK Ni-CI 3.2x350mm ¼ VP	OK 92.18	92183230L0	0.8	4.8	4.8
OK Ni-CI 4.0x350mm ½ VP	OK 92.18	92184030G0	2.3	13.8	13.8
OK NiFe-CI -A 2.5x300mm ¼ VP	OK 92.58	92582520L0	0.7	4.2	4.2
OK NiFe-CI -A 3.2x350mm ¼ VP	OK 92.58	92583230L0	0.7	4.2	4.2
OK NiFe-CI -A 4.0x350mm ½ VP	OK 92.58	92584030G0	1.9	11.4	11.4
OK NiFe-CI 2.5x300mm ¼ VP	OK 92.60	92602520L0	0.8	4.8	4.8
OK NiFe-CI 3.2x350mm ¼ VP	OK 92.60	92603230L0	0.7	4.2	4.2
OK NiFe-CI 4.0x350mm ½ VP	OK 92.60	92604030G0	2.1	12.6	12.6
OK NiCu 1 2.5x300mm ¼ VP	OK 92.78	92782520L0	0.8	4.8	4.8
OK NiCu 1 3.2x350mm ¼ VP	OK 92.78	92783230L0	0.7	4.2	4.2
OK NiCu 1 4.0x350mm ½ VP	OK 92.78	92784030G0	2.2	13.2	**

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## R&M range FCAW

Description	Previous description	GIN	Weight per package (kg)	Weight per carton CT (kg)	Minimum order quantity MOQ (kg)
OK Tubrodur 55 O A 1.6mm 16kg	OK Tubrodur 14.70	1470167730	16	16	16
OK Tubrodur 200 O D 1.6mm 16kg	OK Tubrodur 14.71	1471167730	16	16	16
OK Tubrodur 35 G M 1.6mm 16kg	OK Tubrodur 15.40	1540167630	16	16	16
OK Tubrodur 30 O M 1.6mm 16kg	OK Tubrodur 15.41	1541167630	16	16	16
OK Tubrodur 30 O M 1.6mm 300kg	OK Tubrodur 15.41	1541169460	300	300	300
OK Tubrodur 30 O M 2.4mm 16kg	OK Tubrodur 15.41	1541247630	16	16	**
OK Tubrodur 40 O M 1.6mm 16kg	OK Tubrodur 15.42	1542167630	16	16	16
OK Tubrodur 35 O M 1.2mm4x4.5kg	OK Tubrodur 15.43	1543124630	18	18	**
OK Tubrodur 35 O M 1.2mm 16kg	OK Tubrodur 15.43	1543127630	16	16	16
OK Tubrodur 35 O M 1.6mm 16kg	OK Tubrodur 15.43	1543167630	16	16	16
OK Tubrodur 35 O M 1.6mm 10.5kg	OK Tubrodur 15.43	1543167680	10.5	10.5	**
OK Tubrodur 60 G M 1.2mm 16kg	OK Tubrodur 15.50	1550127730	16	16	16
OK Tubrodur 60 G M 1.6mm 16kg	OK Tubrodur 15.50	1550167730	16	16	16
OK Tubrodur 58 O/G M 1.6mm 16kg	OK Tubrodur 15.52	1552167630	16	16	16
OK Tubrodur 53 G M 1.6mm 16kg	OK Tubrodur 15.84	1584167730	16	16	**
OK Tubrodur 13Mn O/G 1.6mm 12kg	OK Tubrodur 15.60	1560167740	12	12	**
OK Tubrodur 15CrMn O/G 1.2mm 4x5kg	OK Tubrodur 15.65	1565125600	5	20	20
OK Tubrodur 15CrMn O/G 1.6mm 4x5kg	OK Tubrodur 15.65	1565165600	5	20	**
OK Tubrodur 15CrMn O/G 1.6mm 16kg	OK Tubrodur 15.65	1565167730	16	16	16
OK Tubrodur 13Cr G 1.6mm 16kg	OK Tubrodur 15.73	1573167630	16	16	16
OK Tubrodur 35 S M 3.0mm 25kg	OK Tubrodur 15.40S	1V40300300	25	25	**
OK Tubrodur 35 S M 3.2mm 300kg	OK Tubrodur 15.40S	1V40325800	300	300	300
OK Tubrodur 35 S M 4.0mm 25kg	OK Tubrodur 15.40S	1V40400300	25	25	25
OK Tubrodur 35 S M 4.0mm 300kg	OK Tubrodur 15.40S	1V40405800	300	300	300
OK Tubrodur 40 S M 4.0mm 25kg	OK Tubrodur 15.42S	1V42400300	25	25	**
OK Tubrodur 40 S M 4.0mm 270kg	OK Tubrodur 15.42S	1542403410	270	270	270
OK Tubrodur 58 S M 3.0mm 25kg	OK Tubrodur 15.52S	1V52300300	25	25	25
OK Tubrodur 12Cr S 3.0mm 25kg	OK Tubrodur 15.72S	1V72300300	25	25	**
OK Tubrodur 13Cr S 2.4mm 300kg	OK Tubrodur 15.73S	1V73245800	300	300	300
OK Tubrodur 13Cr S 3.0mm 25kg	OK Tubrodur 15.73S	1V73300300	25	25	**
OK Tubrodur 23Cr S 3.0mm 25kg	OK Tubrodur 15.91S	1V91300300	25	25	25

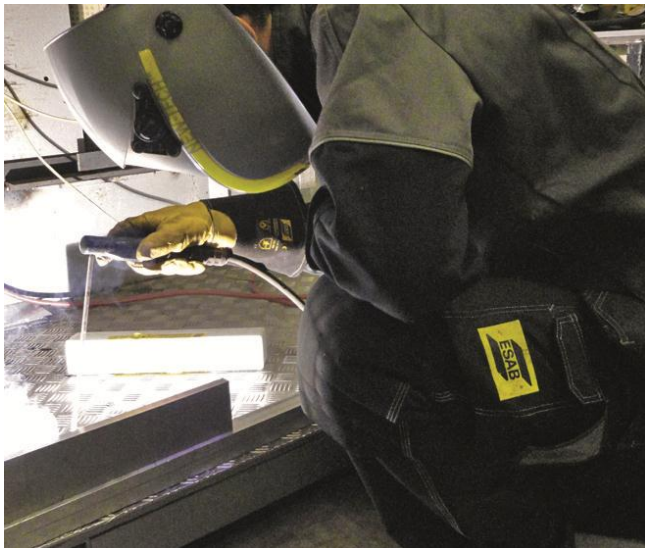
\*\* Multiple cartons are required to order. Please contact your ESAB representative



## R&M range MIG/MAG

Description	Previous description	GIN	Weight per package (kg)	Weight per carton CT (kg)	Minimum order quantity MOQ (kg)
OK Autrodur 30 G M 1.2mm 15kg	C 508	3066127600	15	15	15
OK Autrodur 30 G M 1.6mm 15kg	C 508	3066167600	15	15	15
OK Autrodur 38 G M 1.0mm 15kg	OK Autrod 13.89	1389107700	15	15	**
OK Autrodur 38 G M 1.2mm 15kg	OK Autrod 13.89	1389127700	15	15	**
OK Autrodur 58 G M 1.0mm 15kg	OK Autrod 13.90	1390107700	15	15	**
OK Autrodur 58 G M 1.2mm 15kg	OK Autrod 13.90	1390127700	15	15	**
OK Autrodur 56 G M 1.0mm 15kg	OK Autrod 13.91	1391107700	15	15	15
OK Autrodur 56 G M 1.2mm 15kg	OK Autrod 13.91	1391127700	15	15	15
OK Autrodur 56 G M 1.2mm 250kg	OK Autrod 13.91	1391129320	15	250	**
OK Autrodur 56 G M 1.6mm 15kg	OK Autrod 13.91	1391167700	15	15	**

\*\* Multiple cartons are required to order. Please contact your ESAB representative



ESAB operates at the forefront of welding and cutting technology. Over one hundred years of continuous improvement in products and processes enables us to meet the challenges of technological advance in every sector in which we operate..

### Quality and environment standards

Quality, the environment and safety are three key areas of focus. ESAB is one of few international companies to have achieved the ISO 14001 and OHSAS 18001 standards in Environmental, Health and Safety Management Systems across all our global manufacturing facilities.

At ESAB, quality is an ongoing process that is at the heart of all our production processes and facilities worldwide.

Multinational manufacturing, local representation and an international network of independent distributors brings the benefits of ESAB quality and unrivalled expertise in materials and processes within reach of all our customers, wherever they are located.

ESAB Sales and Support offices worldwide



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MANAGEMENT SYSTEM  
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= ISO 14001 =  
= OHSAS 18001 =