

Environmental Declaration

Company IMI Hydronic Engineering AB SE-524 80 LJUNG		Tel +46 (0)513 540 00 Fax +46 (0)513 508 44 E-mail support.se@imi-hydronic.com	Date 2021-12-21	Edition 1	ID No ED-21-08-en	Page 1 (5)
Issuer Andreas Jonsson	Approved Christofer Sundqvist	Title Environmental Declaration for product: STAF*-SG DN20-400				

Manufacturer

Name	IMI Hydronic Engineering AB
Address	SE-524 80 Ljung, Sweden
Phone	+46 (0)513-54000
Management system	IMI Ljung has a certified quality, environment, and safety management system. The management system is also certified according to the Pressure Equipment Directive. The certificates are published at our webpage, www.imi-hydronic.com

General product information

Designation:	STAF*-SG DN20-400
Type of product:	Balancing valve
Product approvals acc. to:	CE-marking
Technical service life:	>20 years
The product is acc. to REACH defined as:	Product
ROHS-directive (covers electric- and electronical equipment):	Brass alloys which contains <4% Lead(Pb) are excluded in ROHS.

Material composition

Product components	Material	Specification of material composition	CAS-no	Weight%	Comments
Handwheel (DN >150)	Aluminium	Acc. SS-EN 1706	Al 7429-90-5	0–2	For product specific material composition, see appendix A.
Wear ring	Composite	Phenolic laminated fabric (reinforced)		0–<0,001	For product specific material composition, see appendix A.
All DN: Spindle; PT-ports DN20–150: Bonnet; cone	Ametal (brass)	Cu 65 %, Pb 2%, Si 0,7 % Zn 32 %	Cu 7440-50-8 Pb 7439-92-1 Si 7440-21-3 Zn 7440-66-6	1–24	For product specific material composition, see appendix A.
PT-port caps; sliding gaskets; marking details on wheel	Plastic	PA6; PP; PTFE; TPE; HDPE		0,06–2	For product specific material composition, see appendix A.
Screws; gaskets; spring.	Stainless steel			0,01–2	For product specific material composition, see appendix A.
DN 350–400: Cone	Gun metal	Acc. to EN 1982 CuSn5Zn5Pb5		0–7	For product specific material composition, see appendix A.

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All DN: Valve body. DN200–300: Cone DN200–400: Bonnet	Cast iron	Acc. to EN-GJS-400-15		75–97	For product specific material composition, see appendix A.
Screws	Steel	Steel strength class 8.8 EN-ISO 4762		0–1	For product specific material composition, see appendix A.
Sealings (O-rings)	Synthetic rubber	EPDM		0,03–0,2	For product specific material composition, see appendix A.

Other material information

	Yes	No	Additional information
Surface treatment DN 20–200	X		Valve body epoxy coated (epoxy powder paint)
Surface treatment DN 250–400	X		Duasolid paint
Product is Chrome plated		X	
Product is Nickel plated		X	
Product is galvanized	X		Steel bolts are galvanized
Is product containing recycled material	X		Components in cast iron, EN-GJS-400-15, is made from 45-55% recycled material. Ametal ingots are made of approx. 90% recycled raw materials. Splits and scrap from the own production are recycled in the in-house foundry.

REACH and SVHC

Information about SVHC (Candidate list) acc. to REACH	
Packaging	The packaging is not containing any substances on the Candidate list
<input checked="" type="checkbox"/> Brass	The Copper alloy are containing > 0,1% Lead (Pb), CAS No 7439-92-1, which was put in the Candidate list 2018-06-27. Gun metal is only used in the cone for DN350 and 400.
<input checked="" type="checkbox"/> Gun metal	

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Packaging

IMI Hydronic Engineering AB complies with Swedish regulation 2018:1463 regarding producer responsibility of wastepaper, and 2018:1462 regarding producer responsibility of packaging material.			
Materials	Yes	No	
Cardboard / Paper	X		Produced of recycled material at packaging supplier.
Plastic	X		
Wood (pallet)	X		DN >150 are delivered on wooden pallets that can be reused or recycled.

Manufacturing stage

Energy consumption	The company has worked with energy savings since 1989. The company has an in-house foundry, there for example heat excess is used for heating of the offices.
Sustainability	The owner of the company, IMI plc, has made an overall commitment to fulfil UN Global Compact directives. Sustainability work is covered in for example "IMI Code of Conduct", and is reported in the annual report. For more information, see https://www.imiplc.com/ The overall commitment from IMI plc, has been introduced through routines at IMI Ljung.

Transports

Transport contractors	Transport contractors with pronounced sustainability work are chosen in first hand.
To and from the company	Lorry or parcel post. The company is working with transports optimization.

User stage

Storage	No special demands. Normal practice.
Instructions for use	Can be found on homepage: www.imi-hydronic.com
Emissions	No emissions, if used according to normal practice and instructions for use.
Energy	The products are not energy labelled. To lower the energy usage as much as possible, balancing of the products is recommended,

Waste/ Worn out product

IMI Hydronic Engineering AB complies with Swedish regulation 2018:1463 regarding producer responsibility of wastepaper, and 2018:1462 regarding producer responsibility of packaging material.			
Materials	Yes	No	
Worn out product can be recycled	X		Leave worn out products for recycling.
Cardboard / Paper	X		Recycle packing/paper.
Plastic	X		Recycle plastic.

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Waste codes

Waste	EWC code
Brass	17 04 01
Steel	17 04 05
Cardboard	15 01 01
Paper (Packaging)	15 01 01
Plastic	15 01 02

CO₂-load

CO₂-load for foundry castings	<p>Climate indicator from Swedish Foundry Association (SFA) shows that Swedish foundries has the lowest emission of CO₂ per tonne casting.</p> <p>The climate indicator from SFA shows for Brass, 60 kg CO₂ per tonne casting. For further information, see https://en.gjuteriforeningen.se/climate-indicator/</p>
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Appendix A – Product specific material composition

STAF SG DN20-400	52 182-020	52 182-025	52 182-032	52 182-040	52 182-050	52 187-065	52 187-080	52 187-090	52 187-091	52 187-092	52 181-093	52 181-094	52 181-095	52 181-096	52 181-097
Aluminium	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	1,80%	1,09%	0,79%	0,46%	0,36%
Composite	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Brass	9,54%	9,49%	8,00%	8,65%	9,21%	12,66%	13,19%	19,21%	23,23%	23,09%	4,67%	2,83%	1,70%	1,81%	1,51%
Plastics	2,03%	1,66%	1,14%	0,87%	0,71%	1,07%	0,90%	0,64%	0,45%	0,33%	0,32%	0,19%	0,14%	0,08%	0,06%
Stainless steel	0,49%	0,40%	0,28%	0,26%	0,22%	0,03%	0,03%	0,02%	0,01%	0,01%	0,89%	1,30%	0,87%	0,91%	0,84%
Gunmetal	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	6,39%	5,75%
Ductile iron	87,81%	88,33%	90,49%	90,14%	89,80%	85,64%	85,16%	79,59%	75,42%	75,90%	92,28%	94,54%	96,47%	90,30%	91,44%
Steel	0,00%	0,00%	0,00%	0,00%	0,00%	0,47%	0,59%	0,40%	0,76%	0,56%	0,00%	0,00%	0,00%	0,00%	0,00%
EPDM	0,13%	0,11%	0,09%	0,08%	0,07%	0,14%	0,13%	0,15%	0,13%	0,11%	0,04%	0,04%	0,03%	0,04%	0,04%