



FIHEARTMAN

본사∙공장

부산광역시강서구 낙동남로 533번길 55

T.051) 264-8829, 262-8829, 8869

F. 051) 262-9383

R&D 기술연구소

부산광역시강서구 낙동남로 533번길 55

T. 051) 265-0568, 0569

F. 051) 262-8829, 831-9383

HEAD OFFICE & FACTORY

55, Nakdongnam-ro 533beon-gil, Gangseo-gu, Busan, Korea

T.+82-51-264-8829, 262-8829, 8869

F. +82-51-262-9383

CORPORATE R&D CENTER

55, Nakdongnam-ro 533beon-gil, Gangseo-gu, Busan, Korea

T.+82-51-265-0568, 0569

F. +82-51-265-8829, 831-9383

WEB-SITE www.heartman.co.kr

Representative

F_MATI

master@heartman.co.kr

Overseas Sales Dept. | sales@heartman.co.kr Domestic Sales Dept. | korea@heartman.co.kr R

&D Center

rnd@heartman.co.kr



FUEL INJ ECTION

ENGINE PARTS

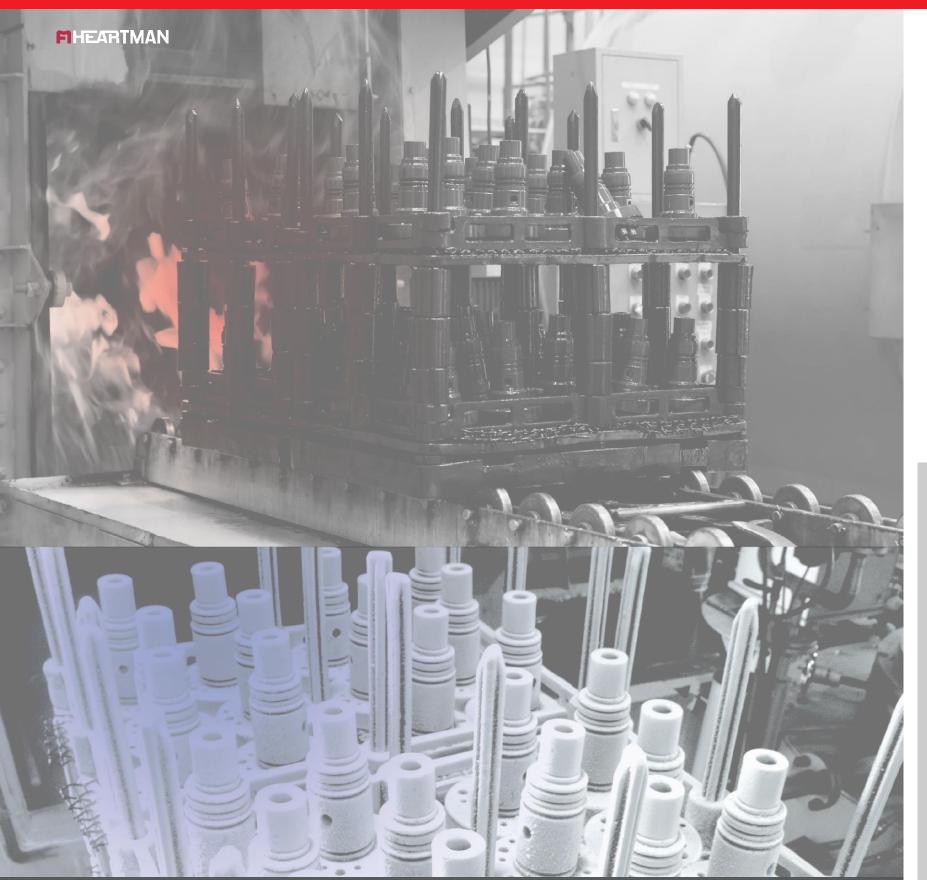




customer First

Prioritize customer's satisfaction through the assurance of the highest quality.

















LABOUT US

HEARTMAN Co., Ltd. was established as a company manufacturing the injection equipment for marine diesel engine in November 1999. Our company had took over craftsmanship of SHINSUNG DIESEL KIKI Co that established at 1965. Our company also has accumulated the precision processing technology and implemented advanced production facilities for more than 20 years.

With such technology and facilities, we have provided essential parts of small, medium(4-storke), and low(2-stroke) speed marine diesel engine, including nozzle, plunger assy, F.O. exhaust & intake cam, and fuel valve & pump assy to domestic and foreign fisheries, shipping companies, power plants, and others.

Through such achievement, we have been recognized as a leading company providing high quality products.

LHISTORY

1999 November 24

Establishment of HEARTMAN Co., Ltd.

주식회사하트만 설립

2000

Supplied Assy for High speed turbo engine MTU 20V 538 to Korea coast guard

고속엔진용MTU 20V 538 플란저조립체 해군에 373세트납품(STX Engine)

2001

Acquired quality management system as per ISO 9001:2009 certification.

ISO 9001 품질경영시스템 인증

October 2006

Acquired environmental management system as per ISO 14001:2004 certification.

ISO 14001환경경영시스템 인증

2008

Approval of Corporate R&D Center by KOITA(Korea Industrial Technology Association)

부설기술연구소 인정

December

2012

March

Supplied STX NIIGATA 34HLX Engine Plunger Assembly 600 sets to NIP (Nico Presision)

for IRAQ power plant

이라크 발전용STX NIIGATA 34HLX 플란저조립체<mark>를 일</mark>본NIP업체에 600세트 납품

2012

Purchasing agreement with Robert Bosch GmbH 로버트보쉬 협력업체 등록

2015

Relocation for expansion of HEARTMAN Co., Ltd. (55, Nakdongnam-ro 533beon-gil, Gangseo-gu, Busan, Korea)

November

주식회사하트만본사 및 공장확장이전(부산시 강서구 낙동남로533번길55)

SMART FACTORY SYSTEM



Point 1 The Paperless factory

The Barcode system greatly facilitates an easier and more efficient way of checking status of work, making changes immediately, and managing production schedules.

Point 2 The Systematic management of BOM (Bill Of Material)

By giving authentication number to all materials, work-in-process, and production process, we can not only check the progress of the production at a glance but also manage and control the optimum inventory.





QUALITY CONTROL

With skilled personnel, state-of-the-art precision measurement equipment, and ISO quality management system, He artman always provides the highest quality product.



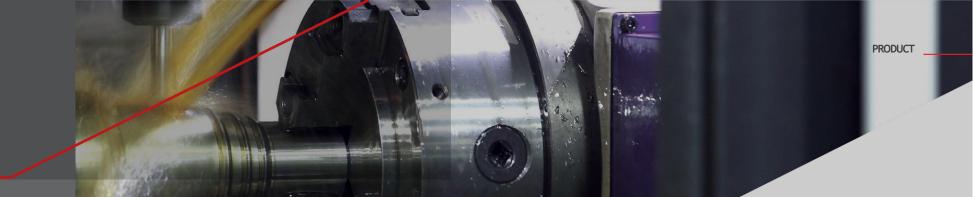
QUALITY TEST

To ensure the perfect quality of products, we are fully equipped with inspection facilities and produce our products with integrity.



Heartman has produced diesel engine parts with a technical know-how accumulated over 20 years. We are dedicated to creating products that always satisfy our customers.

06 FIHEARTMAN



ENGINE TYPE

Fuel Injection engine parts suitable for MAN L+V 16/24& L+V 21/31 type

*Note: Heartman products have no concern with Genuine engine parts and not certified by IMO



ENGINE TYPE

Fuel Injection engine parts suitable for MAN L+V23/30& L+V28/32 type

*Note: Heartman products have no concern with Genuine engine parts and not certified by IMO













PROCESSING

Machining (CNC Lathe+MCT+Drilling)

08 FIHEARTMAN www.heartman.co.kr | 09

ENGINE TYPE

Fuel Injection engine parts suitable for MAN L+V 27/38 & L+V 32/40 type

*Note: Heartman products have no concern with Genuine engine parts and not certified by IMO



ENGINE TYPE

Fuel Injection engine parts suitable for MANL+V48/60type

*Note: Heartman products have no concern with Genuine engine parts and not certified by IMO













PROCESSING

Heat Treatment

ENGINE TYPE

Fuel Injection engine parts suitable for MAN L+V58/64type

*Note: Heartman products have no concern with Genuine engine parts and not certified by IMO



ENGINE TYPE

Spindle Guide Assembly suitable for Man B&W MC/MC-C2-Stroke Engine

*Note: Heartman products have no concern with Genuine engine parts and not certified by IMO



26/35/42MC 50/60/70MC 80/90MC



26/35/42MC

45GFCAI 50/60/70MC MARK(I, II, III)











PROCESSING

Grinding & Honing



Coating Material	Titanium (TiN)	Tungsten(WCC)	Diamond(DLC)
Microhardn ess (HV 0.05)	2,300	1,500 / 1,000	2,500
Friction coefficient against steel (dry)	0.4	0.1 - 0.2	0.10 - 0.20
Max. service temperature (°C/ °F)	600 / 1,100	300 / 570	350 / 650
Coating colour	gold-yellow	anthracite	black
Photo			

depends on application and test conditions

where it all started - and it remains a proven and versatile standard coating.

It provides effective protection against abrasive and adhesive wear. It is often applied for its decorative effect or as a wear indicator.

The titanium nitride coating is

Tungsten Coating, with its low coefficient of friction and good sliding properties, is deployed mainly to reduce adhesivewear (scuffing, seizing, cold-welding) and can also withstand high loads at deficient lubrication or dry running. Surface fatigue(pitting) and tribo-oxidation (fretting corrosion) are largely prevented. Expensive base materials can often be replaced with less expensive steel.

WCC Coating is bio-compatible and foodstuff-neutral.

DLC Coating is a carbon coating (diamond-like carbon) with an unusually dense structure. It combines high hardness with an extremely low frictional coefficient and thus gives particularly good protection against abrasive and adhesive wear, even with minimal quantity lubrication or dry working. The compact coating also improves corrosion resistance. DLC Coating is certified for use in the food processing industry.

	Before Grinding	After Grinding	Result
Picture (B&W L32/40 type)			Edge"R" Creation
Flow Volume (Spec:12,920 ~ 13,720ml/min)	9,500 ~ 10300ml/min	13,290 ~ 13,350ml/min	Flow increases by 30-40%
Grinding Time	250sec/ea		
Effect of Fluid Grinding	The deviation of flow decreases [Spec: 13,290 ~ 13,350ml/min]		

FLUID GRINDING & FLOW VOLUMETEST FOR NOZZLESPRAY HOLE

PROCESSING Fluid grinding & Flow test

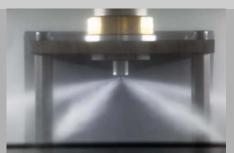






PROCESSING Test







PRODUCT

14 FIFEARTMAN www.heartman.co.kr | 15

