



# TYPE APPROVAL CERTIFICATE

**Certificate No.** : MIL39925-PE002

**Initial Approval** : 28th November, 2012

**Product** : Flange Couplings

**Manufacturer** : I.M.M. Hydraulics S.p.A  
Via Italia, 49-51, Atessa 66041, Italy

**Product Description** : GS 37° Flared Flange Connection

" See Appendix 1 "

**Approval Condition** : " See Appendix 1 "

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt.5, Ch.6, Sec.1 of the Rules for Classification of Steel Ships.  
The Rules for Classification of Offshore Units.

This Certificate is valid until 27th November, 2024

Issued at Busan, Korea on 28th November, 2019



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No (ME19034817177) and certificate No.(MIL39925-PE002).



**KOREAN REGISTER OF SHIPPING**

*General Manager of  
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
  2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
  3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
  4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

## Appendix 1

# Product Description and/or Approval Condition

**Certificate No :** MIL39925-PE002

**Date of Issue :** 28th November, 2019

### 1. Product Description :

| GS-Flange System | Face type   | Size, flange  | Size, pipe       | Pressure(bar) |
|------------------|-------------|---------------|------------------|---------------|
| 37° Flare        | SAE 50bar   | 1 1/2" to 10" | 50x3-273x6       | 50            |
| 37° Flare        | SAE 3000psi | 1/2" to 3"    | 16x2-90x5/97x12  | 350           |
| 37° Flare        | SAE 6000psi | 1/2" to 2"    | 16x2-60x6/66x8.5 | 420           |

### 2. Material

- Flange : carbon steel, stainless steel, titanium
- Pipe : mild steel, galvanized steel, copper nickel, titanium
- Seal : Viton, NBR, Klinger

### 3. Application

- Cargo oil & tank cleaning system
- Open ended pipes
- Low pressure mud & jet water
- Fresh water and sea water, compressed air, fuel oil, lub oil and hydraulic oil, steam and condensate system.

### 4. Approval Condition

- 1) This approval is granted on the basis of catalogs and test reports submitted by Manufacturer.
- 2) The other choice of material could be used depending on Manufacturer' instruction and KR agreement.
- 3) The Product is to be marked with manufacturer name and type designation on a suitable position.
- 4) Individual Product Certification is required in case where the Flange Couplings are used for Class I or II Piping Systems.

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# TYPE APPROVAL CERTIFICATE

**Certificate No.** : MIL39925-PE001 **Initial Approval :** 28th November, 2012  
**Product** : Flange Couplings  
**Manufacturer** : I.M.M. Hydraulics S.p.A  
 Via Italia, 49-51, Atessa 66041, Italy

**Product Description** : GS 90° Flared Flange Connection

" See Appendix 1 "

**Approval Condition** : " See Appendix 1 "

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt.5, Ch.6, Sec.1 of the Rules for Classification of Steel Ships.  
 The Rules for Classification of Offshore Units.

This Certificate is valid until 27th November, 2024

Issued at Busan, Korea on 28th November, 2019



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## Appendix 1

# Product Description and/or Approval Condition

**Certificate No :** MIL39925-PE001

**Date of Issue :** 28th November, 2019

### 1. Product Description :

| GS-Flange System | Face type | Size, flange | Size, pipe       | Pressure(bar) |
|------------------|-----------|--------------|------------------|---------------|
| 90° Flare        | SAE J518C | 1/2" to 8"   | 16x1.5-220x6     | 10-40         |
| 90° Flare        | ANSI      | 1/2" to 16"  | 21.3x2.1-406x8.8 | 10-40         |
| 90° Flare        | DIN       | 1/2" to 16"  | 21.3x2.1-406x8.8 | 10-40         |

### 2. Material

- Flange : carbon steel, stainless steel, titanium
- Pipe : mild steel, galvanized steel, copper nickel, titanium
- Seal : Viton, NBR, Klinger

### 3. Application

- Marine Class III piping system
- Cargo oil & tank cleaning system
- Open ended pipes
- Low pressure mud & jet water
- Fresh water and sea water, compressed air, fuel oil, lub oil and hydraulic oil, steam and condensate system.

### 4. Approval Condition

- 1) This approval is granted on the basis of catalogs and test reports submitted by Manufacturer.
- 2) The other choice of material could be used depending on Manufacturer's instruction and KR agreement.
- 3) The Product is to be marked with manufacturer name and type designation on a suitable position.

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# TYPE APPROVAL CERTIFICATE

**Certificate No.** : MIL39925-PE003 **Initial Approval :** 28th November, 2012  
**Product** : Flange Couplings  
**Manufacturer** : I.M.M. Hydraulics S.p.A  
Via Italia, 49-51, Atessa 66041, Italy

**Product Description** : GS Retain Ring Flange Connection

" See Appendix 1 "

**Approval Condition** : " See Appendix 1 "

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt.5, Ch.6, Sec.1 of the Rules for Classification of Steel Ships.  
The Rules for Classification of Offshore Units.

This Certificate is valid until 27th November, 2024

Issued at Busan, Korea on 28th November, 2019



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No (ME19034556178) and certificate No.(MIL39925-PE003).



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## Appendix 1

# Product Description and/or Approval Condition

**Certificate No :** MIL39925-PE003

**Date of Issue :** 28th November, 2019

### 1. Product Description :

| GS-Flange System | Face type  | Size, flange  | Size, pipe         | Pressure(bar) |
|------------------|------------|---------------|--------------------|---------------|
| Retain Ring      | SAE50bar   | 1 1/2" to 10" | 50x3-273x6         | 50            |
| Retain Ring      | SAE3000PSI | 1/2" to 3"    | 26x6-97x12         | 350           |
| Retain Ring      | SAE6000PSI | 1/2" to 2"    | 26x6-66x8.5        | 420           |
| Retain Ring      | GS Flange  | 2" to 14"     | 66x8.5-355.6x50.80 | 350-400       |

### 2. Material

- Flange : carbon steel, stainless steel, titanium
- Pipe : mild steel, galvanized steel, stainless steel, copper nickel, titanium
- Seal : Viton, NBR, Klinger

### 3. Application

- Cargo oil & tank cleaning system
- Open ended pipes
- Low pressure mud & jet water
- Fresh water and sea water, compressed air, fuel oil, lub oil and hydraulic oil, steam and condensate system.

### 4. Approval Condition

- 1) This approval is granted on the basis of catalogs and test reports submitted by Manufacturer.
- 2) The other choice of material could be used depending on Manufacturer' instruction and KR agreement.
- 3) The Product is to be marked with manufacturer name and type designation on a suitable position.
- 4) Individual Product Certification is required in case where the Flange Couplings are used for Class I or II Piping Systems.

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