

PT. BIRO KLASIFIKASI INDONESIA

PETUNJUK MASTER LIST CMS



2009

PETUNJUK MASTER LIST CMS

CMS List pada kapal baru teregister :

1. CMS List diberikan pada kapal klas BKI bermesin tanpa batasan Tenaga Mesin. Kecuali kapal jenis sea truck.
2. CMS List dibuat baru setiap ada penerimaan kelas bangunan baru / lama.
3. Surveyor wajib mengisi form CMS.
4. Form CMS berisi daftar komponen mesin yang ada dikapal disesuaikan dengan item-item CMS pada petunjuk master list ini.
5. Form CMS diketahui oleh KKM kapal.
6. Surveyor melampirkan form CMS pada laporan survey penerimaan kelas.
7. Aktivitas berikut dilaksanakan saat survey penerimaan kelas meliputi :
 - a. Kantor Pusat (Divisi Survey) memberikan kode-kode item CMS sesuai petunjuk master list ini.
 - b. Kantor Pusat (Divisi Survey) menerbitkan master list CMS kapal tersebut.
 - c. Kantor Pusat (Divisi Survey) mengirimkan sertifikat permanen dalam rangka penerimaan kelas beserta master list CMS ke pemilik dan kantor cabang.
 - d. Kantor pusat (Divisi Survey) menjelaskan kepada pemilik apakah kapal akan diikutkan CMS / tidak.
8. Jika tidak ikut CMS, master list CMS tetap harus diupdate dilaporan survey oleh surveyor setiap survey pembaruan kelas.

CMS List pada kapal sudah teregister namun belum ikut CMS :

1. CMS List diberikan pada kapal klas BKI bermesin tanpa batasan Tenaga Mesin. Kecuali kapal jenis sea truck.
2. Surveyor yang melaksanakan survey pembaruan kelas / docking mengisi form CMS.
3. Form CMS berisi daftar komponen mesin yang ada dikapal disesuaikan dengan item-item CMS pada petunjuk master list ini.
4. Form CMS diketahui oleh KKM kapal.
5. Surveyor melampirkan form CMS pada laporan survey pembaruan kelas / docking.
6. Aktivitas berikut dilaksanakan saat survey pembaruan kelas meliputi :
 - a. Kantor Pusat (Divisi Survey) memberikan kode-kode item CMS sesuai petunjuk master list ini.
 - b. Kantor Pusat (Divisi Survey) menerbitkan master list CMS kapal tersebut.
 - c. Kantor Pusat (Divisi Survey) mengirimkan master list CMS ke pemilik dan kantor cabang.
 - d. Kantor pusat (Divisi Survey) menjelaskan kepada pemilik apakah kapal akan diikutkan CMS / tidak.
7. Jika tidak ikut CMS, master list CMS tetap harus diupdate dilaporan survey oleh surveyor setiap survey pembaruan kelas.

CMS Kapal dibagi dalam 3 kelompok :

A. Mesin Induk :

Kode M1xaabb

x = sequence mesin induk

aa = komponen mesin induk

bb = sequence komponen mesin induk

<i>aa</i>	<i>Keterangan</i>
01	Cylinder Cover
02	Cylinder Liner
03	Piston, Pin and Bearing
04	Piston Rod, Crosshead, Pin and Bearing
05	Connecting Rod
06	Crankpin and Bearing
07	Journal and Main Bearing
08	Fuel Injection Pump
09	Camshaft and Timing Gear
10	Supercharger

- 11 Turbocharger
- 12 Auxiliary Blower For M/E
- 13 Air Intercooler
- 14 Vibration Damper
- 15 Crankcase Doors and Relief Devices
- 16 Turning Gear

Contoh : Kode M110106 bermakna :

- M1 berarti Mesin Induk
- 1 berarti Mesin Induk No. 1
- 01 berarti Cylinder Cover
- 06 berarti Cylinder Cover No.6

B. Mesin Bantu :

Kode M2xaabb

x = sequence mesin bantu

aa = komponen mesin bantu

bb = sequence komponen mesin bantu

aa Keterangan

- 01 Auxiliary Engine Unit
- 02 Generator
- 03 Emergency Generating Set → dengan x = 0
- 04 Shaft Generator → dengan x = 0

C. Peralatan Lainnya

1. Transmission System : Kode M30aabb

aa = komponen shafting

bb = sequence komponen shafting

aa Keterangan

- 01 Intermediate Shaft
- 02 Intermediate Shaft Bearings
- 03 Thrust Shaft and Bearing
- 04 Coupling and Bolts
- 05 Reduction & Reversible Gear

2. Lubricating Oil System : Kode M31aabb

aa = komponen LOS

bb = sequence komponen LOS

aa Keterangan

- 01 Main Lubricating Oil Pump driven by M/E
- 02 Main Lubricating Oil Pump
- 03 Lubricating Oil Priming Pump
- 04 Reduction Gear Lubricating Oil Pump (Attached)
- 05 Reduction Gear Lubricating Oil Pump (Standby)
- 06 Reduction Gear Lubricating Oil Pump
- 07 CPP Lubricating Oil Pump (Attached)
- 08 CPP Lubricating Oil Pump
- 09 Stern Tube Lubricating Oil Pump
- 10 Lubricating Oil Transfer Pump
- 11 Camshaft Lubricating Oil Pump (Attached)
- 12 Camshaft Lubricating Oil Pump
- 13 Turbocharger Lubricating Oil Pump
- 14 Dirty Oil Pump
- 15 Lubricating Oil Purifier

- 16 Lubricating Oil Purifier Heater
- 17 M/E Lubricating Oil Cooler
- 18 A/E Lubricating Oil Cooler
- 19 Reduction Gear Lubricating Oil Cooler
- 20 CPP Lubricating Oil Cooler
- 21 Stern Tube Lubricating Oil Cooler
- 22 Turbocharge Oil Cooler
- 23 Supercharger Oil Cooler
- 24 Cyl. Oil Service Pump (Attached)
- 25 Cross Head Lubricating Oil Pump

3. Fuel Oil System : Kode M32aabb

aa = komponen FOS

bb = sequence komponen FOS

aa Keterangan

- 01 Fuel Oil Transfer Pump
- 02 Aux. Diesel Fuel Oil Transfer Pump
- 03 Fuel Oil Booster Pump (Attached)
- 04 Fuel Oil Booster Pump
- 05 Boiler Fuel Oil Heater
- 06 Fuel Oil Purifier
- 07 Main Engine Fuel Oil Heater
- 08 Aux. Diesel Fuel Oil Purifier
- 09 Boiler Fuel Oil Transfer Pump
- 10 Fuel Oil Purifier Heater
- 11 Booster Pump For Generator Engine
- 12 Heavy Fuel Oil Heater
- 13 Fuel Oil Settling Tank
- 14 Fuel Oil Service Tank
- 15 Boiler Fuel Oil Service Tank
- 16 Aux. Diesel Fuel Oil Service Tank
- 17 Fuel Oil Burning Pump
- 18 Fuel Oil Valve Cooling Pump
- 19 Aux. Diesel Fuel Oil Heater

4. Cooling System : Kode M33aabb

aa = komponen Cooling System

bb = sequence komponen Cooling System

aa Keterangan

- 01 Main Sea Water Cooling Pump driven by M/E
- 02 Main Sea Water Cooling Pump
- 03 Auxiliary Sea Water Cooling Pump
- 04 Condenser Sea Water Cooling Pump
- 05 Main Fresh Water Cooling Pump driven by M/E
- 06 Main Jacket Fresh Water Cooling Pump
- 07 Piston Fresh Water Cooling Pump
- 08 Piston Oil Cooling Pump
- 09 Auxiliary Fresh Water Cooling Pump
- 10 Main Jacket Fresh Water Cooler
- 11 Auxiliary Fresh Water Cooler
- 12 Water Cooling Pump (Standby)
- 13 Nozzle Cooling Pump
- 14 Warming Up Circulating Pump
- 15 Piston Fresh Water Cooler
- 16 Drain Cooler

5. Bilge and Ballast System : Kode M34aabb
aa = komponen Bilge and Ballast System
bb = sequence komponen Bilge and Ballast System

<i>aa</i>	<i>Keterangan</i>
01	Bilge Pump
02	Ballast Pump
03	Bilge and Ballast Pump
04	Fire and General Service Pump
05	Drain Pump
06	Oily Bilge Separator Pump
07	Sludge Pump

6. Pump Room Machinery : Kode M35aabb
aa = komponen Pump Room Machinery
bb = sequence komponen Pump Room Machinery

<i>aa</i>	<i>Keterangan</i>
01	Cargo Oil Pump
02	Stripping Pump
03	Washing Pump
04	Ballast Pump in Pump Room
05	Bilge Pump in Pump Room
06	Slop Pump

7. Fire Extinguishing System : Kode M36aabb
aa = komponen Fire Extinguishing
bb = sequence komponen Fire Extinguishing

<i>aa</i>	<i>Keterangan</i>
01	Fire Pump
02	Emergency Fire Pump
03	Pressure Water Tank Pump
04	Priming Pump

8. Compressed Air System : Kode M37aabb
aa = komponen Compressed Air
bb = sequence komponen Compressed Air

<i>aa</i>	<i>Keterangan</i>
01	Main Air Compressor
02	Emergency Air Compressor
03	Control Air Compressor
04	Main Air Reservoir
05	Auxiliary Air Reservoir
06	Control Air Reservoir

9. Deck Machinery : Kode M38aabb
aa = komponen Deck Machinery
bb = sequence komponen Deck Machinery

<i>aa</i>	<i>Keterangan</i>
01	Hydraulic Steering Gear Pump
02	Hydraulic Pump for Windlass
03	Hydraulic Pump for Mooring Winch
04	Thruster Propeller Unit
05	Hydraulic Pump for Ramp Door
06	Hydraulic Pump for Windlass & Mooring
07	Watertight Doors System

- 08 Hydraulic Pump for Cargo Winch
- 09 Windlass
- 10 Mooring Winch

10. Gas Plan System : Kode M39aabb

aa = komponen Sanitary System
bb = sequence komponen Sanitary System

aa Keterangan

- 01 Gas Pressure Relief Valve
- 02 Gas Compressor
- 03 Gastight Bulkhead Seal
- 04 Gas Plan Pump
- 05 Gas Heater / Cooler
- 06 Gas Condenser
- 07 Gas Heat Exchanger
- 08 Gas Receiver
- 09 Surgedrum
- 10 Purge Collector

11. Sanitary System : Kode M40aabb

aa = komponen Sanitary System
bb = sequence komponen Sanitary System

aa Keterangan

- 01 Fresh Water Pump
- 02 Sea Water Pump
- 03 Fresh Water Generator
- 04 Sewage Pump

12. Boiler System : Kode M41aabb

aa = komponen Boiler System
bb = sequence komponen Boiler System

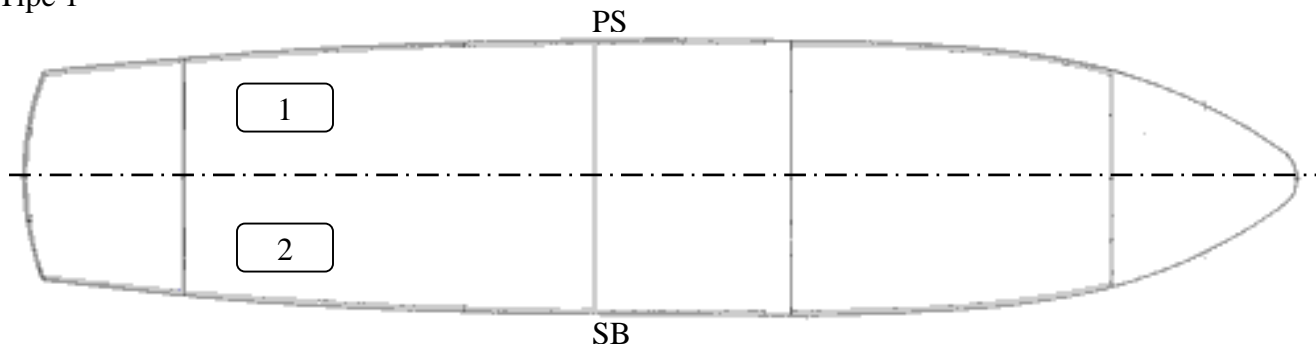
aa Keterangan

- 01 Feed Water Pump
- 02 Circulating Pump
- 03 Condenser
- 04 Economizer
- 05 Thermo Oil Circulating Pump
- 06 Condensate Extraction Pump

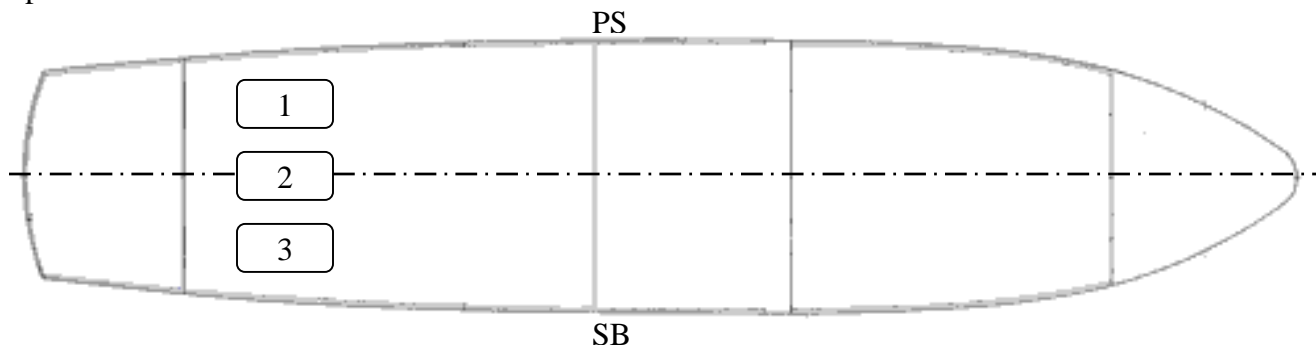
Tabel Konversi Kode CMS Lama ke Kode CMS Baru bisa dilihat di dokumen PDF di website BKI.

PENOMORAN POSISI MESIN INDUK , MESIN BANTU / POMPA

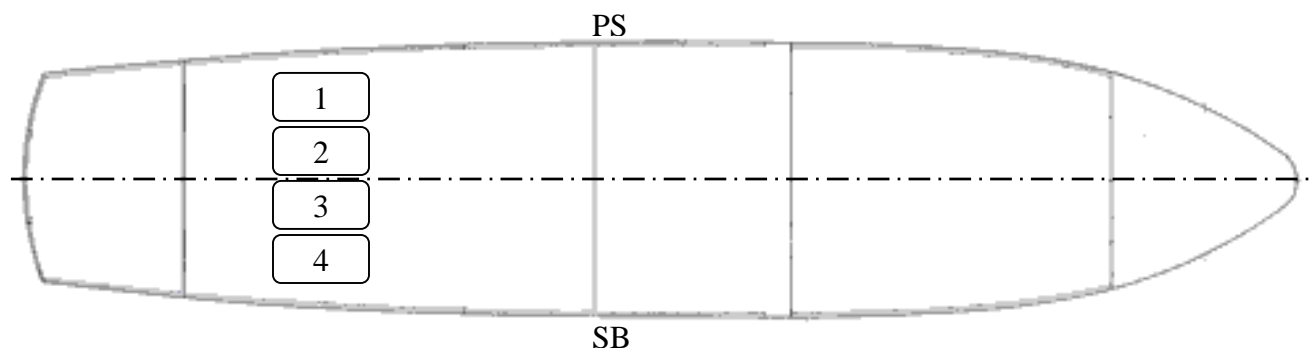
Tipe 1



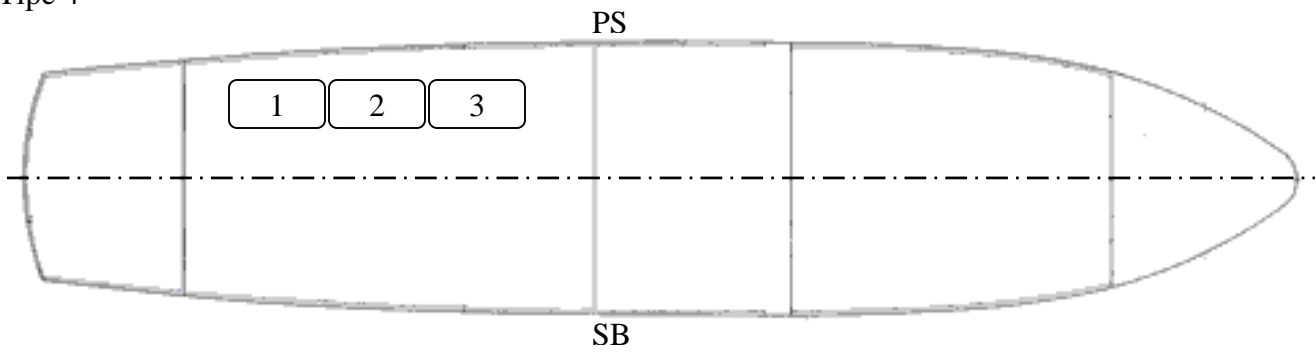
Tipe 2



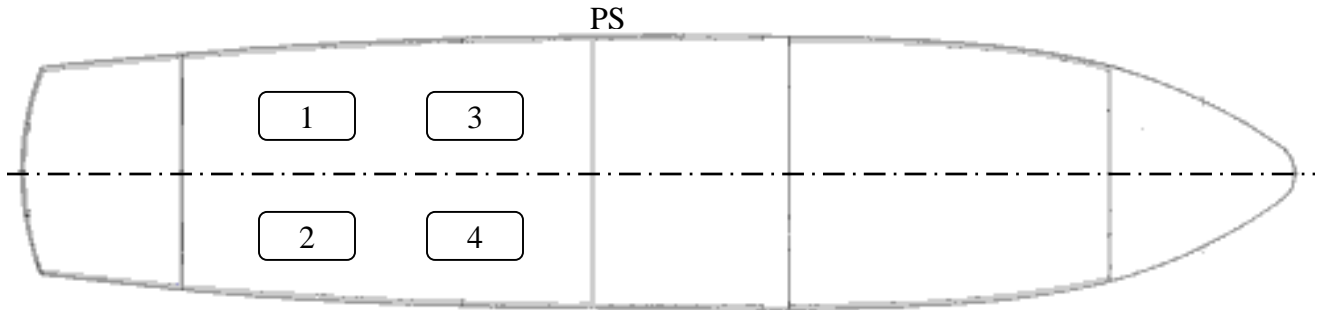
Tipe 3



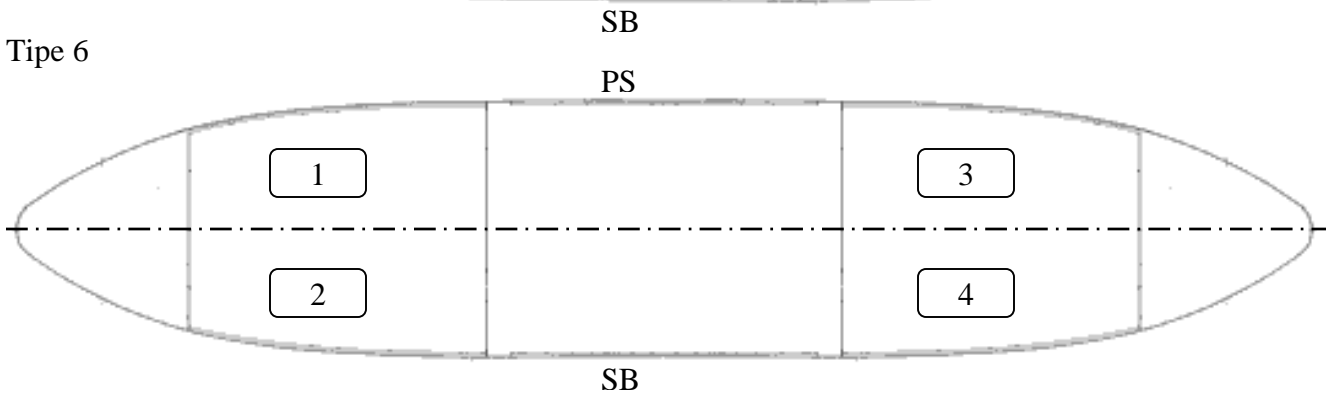
Tipe 4



Tipe 5



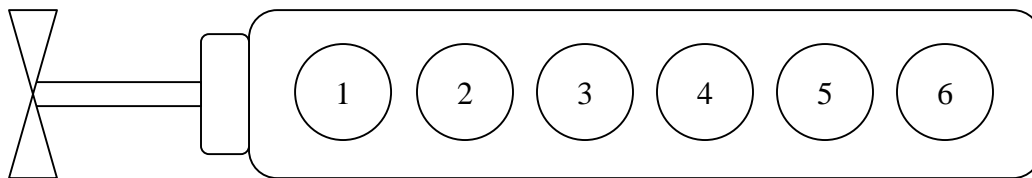
Tipe 6



Untuk Engine Room lebih dari 1 lantai, mesin yang berada di lantai bawah diberi nomor lebih awal.

PENOMORAN CYLINDER MESIN DAN JOURNAL

Tipe In - Line



Tipe V

