

GENERAL SPECIFICATION

Field Operations

GS EP EXP 501

Equipment and piping numbering

05	10/2012	Update
04	01/2011	Update for Pipeline & Sub sea facilities
03	10/2008	Update of listings
02	10/2005	Addition of "EP" root to GS identification
01	10/2004	Hips code modification
00	11/2003	First issue
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1. Scope

This document defines the minimum requirements for an identification system for all surface equipment.

“Equipment” means any identified item, which will be designed during a project.

“Equipment” includes major and minor equipment, valves, instruments, cables, lines, flow-line elements, manifold etc. and, if necessary their component parts, in such a way that they can be easily located with a unique reference (tag mark) in all related documents.

For instruments, cable and structure, the numbering is described in other specifications listed in the reference documents.

Insulation and fitting are considered as bulk and will not be reference tagged.

2. Reference documents

The reference documents listed below form an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the effective date of this document.

Reference	Title
Not applicable	

Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published in the applicable yearly collection.

Reference	Title
GS EP EXP 207	Installation description structure
GS EP INS 102	Instrumentation identification
GS EP INS 107	Design and installation of instrumentation links
GS EP PVV 112	Piping material classes
GS EP TEL 710	Telecom equipment numbering

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3. “Equipment” numbering

The “Equipment” numbering system is intended to be logically applied such that the numbers represent meaningful information for users.

1	2	P		2	2	0	1	A			
Sector code		Equipment type		system code	Sub-system code	Sequential number		Discrimination code			

3.1 Sector or Structure code (two numerical characters)

A Sector is a set of Systems situated in a single (same) location and including multiple process or utility systems.

The boundary of sectors should match the breakdown of the facilities or infrastructures as defined at project execution phase.

In offshore situations, the sector corresponds to installations (Processing central platform, production satellite, Living quarters platform, FPSO, etc.), or main contract items (SPS, Top sides, living quarters, etc.).

For onshore situations, it corresponds to areas such as a cluster, or a small plant such as a production treatment centre.

For large plants, like LNG or gas plants, a sector can cover a number of systems that have relative autonomy, such as a gas treatment train, sector of common utilities, etc. For subsea, it includes umbilicals, flowlines, risers, and subsea production systems (wells and manifolds).

The Sector Code is given by the Company.

3.2 “Equipment” type (two alpha characters)

A type of equipment is used:

- In project to manage file of equipment
- In Operation to:
 - Standardising list of characteristic in CMMS (Computerised Maintenance Management System)
 - Assigning common procedure to a type of equipment
 - Select type of equipment for statistic or research.

These two characters define the type of “Equipment” within the tag.

A list of Equipment types is given in Appendix 1. It may be amended where necessary to incorporate new equipment, subject to prior Company approval.

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3.3 System code (one alpha-numerical character)

A system corresponds to main process and utility function.

List of system:

System code	Name
0	Critical and safety systems
1	Hydrocarbon extraction
2	Produced liquid processing
3	Produced gas processing
4	Produced gas liquid processing
5	Water processing
6	Electric energy
7	Common Facilities
8	Housing & Others
9	*

* system code 9 is available for specific applications.

3.4 Sub-system code (one alpha-numerical character)

A Sub-system (unit) is a group of equipment handling the same main fluid (i.e. classified under the same system) and dedicated to a specific process function. The term “process function” is to be construed in its broadest sense (e.g. the process functions of the Electricity system are power generation, power distribution, lighting).

A sub-system belongs to a system. In case of ambiguity to assign a subsystem to a system one should ask the question: If the sub-system is shut down, which system is affected? The sub-system will belong to the main affected system.

The list of sub-system codes is given in Appendix 2. It may be amended where necessary to include additional specific systems or sub-systems, subject to prior Company approval.

Some sub-system are numbered in several system (i.e: a dehydration may be used for as well for Gas lift or gas injection). Only one sub system will be installed on the sector and it should be assigned to the main function.

Note that the system and sub-system codification is defined in order to standardise the numbering and ensure that this numbering will fit during the field life cycle.

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3.5 Sequential Number (two numerical characters)

The sequential number is coded with a maximum of two characters for the identification of each item of "Equipment". This numbering will be discriminated by sub-system (i.e. one register for each sub-system).

The sequential number is established by type of "Equipment".

Example:

In the same sub-system "28", we may find Centrifugal Pump "PA2801" and Sump caisson "TC 2801".

3.6 Discrimination code (Maximum four alphanumerical characters)

For the identification of several same type items of "Equipment" used in parallel, for identical equipment used in series (cooler, etc.), or for tagging of a sub-equipment package (see Appendix 3).

In general:

- First level parallel "Equipment" will be identified by the first letter
- Second level parallel "Equipment" will be identified in the second number
- First level series of identical equipment will be identified by a number

Examples of Discrimination codes and their explanations are given in Appendix 3.

3.7 Numbering of complex "Equipment"

Complex equipment is a unit/package comprising several elemental items of equipment. The package will be identified by the general ("family") tag and may comprise sub Tags.

Example 1:

An alternator driven by a gas turbine belonging to sub-system 60 will be tagged:

Power generation unit: G_6001

It is composed of:

- Gas turbine DT6001
- Alternator GE6001

Example 2:

Process Package Chemical injection UI7501

It is composed of:

- Two storage tanks TR7501A & TR7501B
- Two injection rotating displacement Pumps PC7501A & PC7501B

Example 3

Complex rotating "Equipment" Compressor for Gas-lift: K_3101A

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It is composed of:

- Main centrifugal gas compressor KA3101A
- Centrifugal Lubricating pumps PA3101A-1A & PA3101A-1B
- Centrifugal Seal oil pump PA3101A-2
- Lube oil storage tank TR3101A

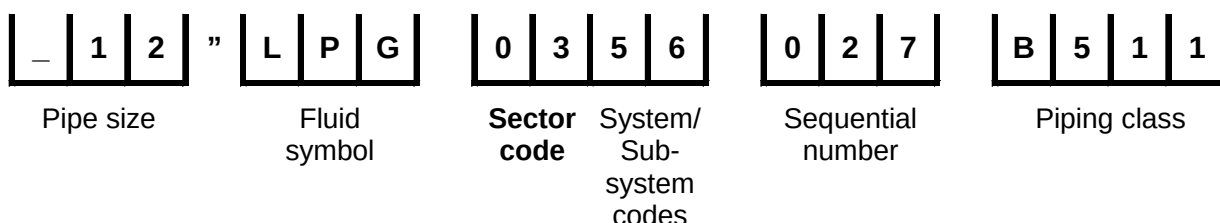
4. Instrumentation equipment codification

All instruments, including control valves, PSV and orifices are tagged following Company specification **GS EP INS 102** with the following precisions:

- The "first field" named "Plant or Construction" in the **GS EP INS 102** corresponds to the Sector/structure. Only 2 last characters are used. The two first digits are not use.
- For the "second field", the **GS EP INS 102** shall be strictly respected.
- For the "third field", the first two digits represent the System/subsystem as described in Appendix 2 (the "section" mentioned in **GS EP INS 102** refers to the same purpose in some existing installation design).

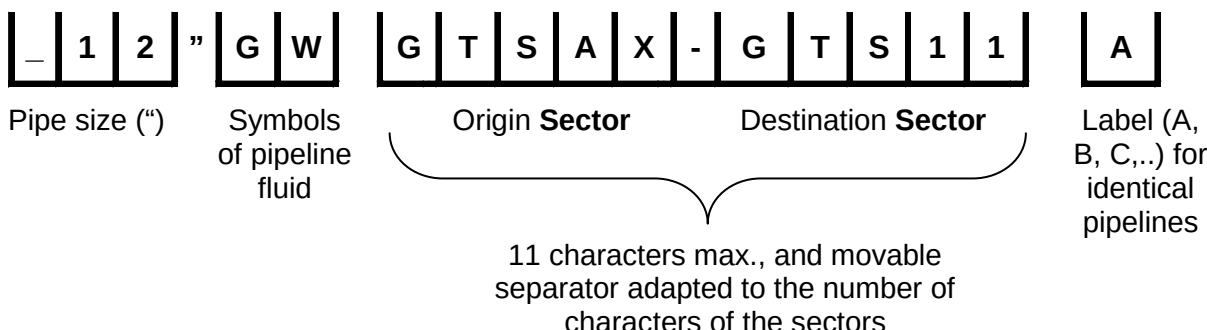
5. Numbering for piping and pipelines

All piping shown in the P&IDs shall be identified by numbers, created in the following manner:



Piping tagging shall not contain blanks. Any blank digit shall be filled by an underscore "_".

For the pipelines, the numbering is the following:



Naming for pipeline sections for Risk Based Inspection purpose is described on the guideline & manual.