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CCS E 94

SY

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

SY/T 7053-2016

**Global buckling of submarine pipelines. Structural design due
to high temperature/high pressure**

海底管道总体屈曲——高温高压下的结构设计

(English Translation)

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What this standard covers

This standard applies to the design of rigid ducts that may be in general buckling. The overall buckling generally refers to so-called high pressure/high temperature pipelines, but may be medium temperature pipelines (eg very light pipelines) depending on the overall buckling resistance. This standard does not take into account the effects of temperature and pressure on materials, insulation, thermal conditions and flow protection, but only to the overall buckling of an analytical process and acceptance criteria. Therefore, there is no restriction on pressure and temperature in this standard unless structural limitations are caused by material properties. This standard covers the overall buckling of local buckling. The design flow also provides the optimal estimated stress value and its upper limit for fracture assessment. Refer to DNV-OS-F101 for other failure modes.

High-temperature/high-pressure piping Three general buckling scenes are included in this standard: 1) flat seaside

Document data

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Standards quoted by this document

DNV-OSS-301; DNV-OSS-302; DNV-OSS-401; DNV-OS-F101; DNV-OS-F201;
DNV-RP-A203; DNV-RP-F105; DNV-RP-F108; DNV-RP-F109; DNV-RP-F111; BS 7910