



# OIL & GAS INSTRUMENTATION

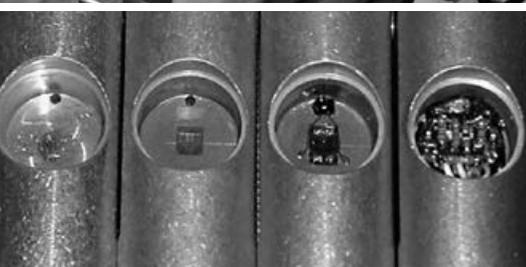
## LOAD-FORCE-TORQUE SENSORS



LOAD CELL  
MANUFACTURER



**FROM DESIGN TO AFTER-SALES SUPPORT, SENSY IS DEDICATED TO SERVING THE OIL & GAS INDUSTRY**



# OUR STRENGTHS

**SENSY S.A.** develops and manufactures both [standard](#) and [custom-made load cells](#), load pins and force transducers. These sensors are intended for systems for load limitation, effort or force measurement (from 1 to 6,000,000 lbf / 3,000 tf), torque measurement (from 1 to 350 kft-lb / 475 kNm), and level measurement (for silos and tanks).

We also design transducers for all [industrial and Oil & Gas sectors](#), including the most demanding ones, such as the [aerospace sector](#). This means that we develop sensors able to work in harshest environments (high temperatures, underwater to depths of 16,000 ft/5,000 m, Ex-certified for use in potentially explosive atmospheres, etc.).

Since our first ATEX certification in 1997, we have developed a great deal of experience in this field. More recently, we have been awarded two new intrinsic safety certifications: [CSA](#) (USA and Canada) and [IECEX](#).

Not only do these certifications impose additional technical constraints, but they also enforce compliance with a specific Quality Assurance system (QA), thereby guaranteeing quality. And, as expected, our quality system is [EN13980](#) and [ISO / IEC 80079-34 certified](#).

Thanks to the valuable resources allocated to our R&D department, SENSY continues to excel in this specialist sector but also on [aerospace industry](#).

In order to meet the specific requirements and to ensure the [highest quality](#) to our customers, SENSY's procedures and processes are in accordance with the [EN9100 quality standards](#).



**LOAD CELL**  
MANUFACTURER



EN 13980



EN 9100  
COMPLIANT



# RIG INSTRUMENTATION

## TOP DRIVE INSTRUMENTATION

Tension - compression  
Capacities: 2 - 3,000,000 lbf  
 (1 - 1,500 tf)

Torque  
Capacities: 1 - 350 kft-lb  
 (1 - 475 kNm)

\* Ex wireless



5000



## HOOK LOAD

MWD, Mud logging, etc.  
Capacities\*: 60 - 150,000 lbf  
 (30 - 75 tf)

Rope diameter\*: 0.875 - 2.25 in  
 (22 - 57.15 mm)

\* Higher on request



5560S



## DEAD LINE ANCHOR

- 3 redundant channels
- Accessible wiring terminal for on site cable repair

Capacities: 30 - 120,000 lbf  
 (15 - 60 tf)



5950-FS



## POWER TONGS

Measure the torque through load pin or tension/compression cell

Capacities\*: 1 - 100,000 lbf  
 (1 - 50 tf)

\* Higher on request



5000

5100



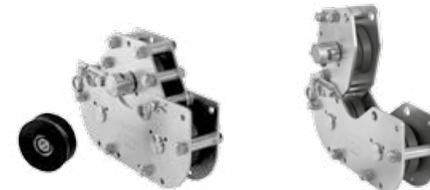
## WIRE LINE

Running line: Removable upper sheave block\*\*

Capacities\*: 5 - 20,000 lbf Rope diameter: 0.25 - 0.52 in  
 (2.5 - 10 tf) (6 - 13 mm)

\* Higher on request

\*\* Integration of payout and/or speed encoders on request



5580



## COILED TUBING

Tension + compression through pancake load cells or load pins / Force measurement at injector

Capacities\*: 30 - 80,000 lbf  
 (15 - 40 tf)

\* Higher on request



2960

5000





# MARINE



## MOORING CONTROL (ON SHIPS, SEMI-SUBMERSIBLES, FPSO's)

Capacities\*: 2 - 150,000 lbf (1 - 75 tf)    Rope diameter\*\*: 0.875 - 3.54 in (22 - 90 mm)

\* Higher on request

\*\* Cable for running line tensiometer (steel ropes or dyneema)



**5540S**

Quick release  
ATEX (Explosion proof)



**5580**

Integration of payout and/or speed  
encoder on request



**5575**



**5050**

Up to 2,000,000 lbf  
(Up to 1,000 tf)



# ELECTRONICS



## INSTRUMENTATION

As a manufacturer of load cells and force transducers, we can supply complete measurement chains by connecting electronics to our products to meet your specific needs. Beside analogical or digital amplifiers integrated in our load cells or mounted on cables, we also offer a broad range of electronic equipment, dedicated software and Ex wireless transmitter to meet customer requirements.



Load monitoring of BOP  
cranes in ATEX zone



Load display  
in ATEX zone

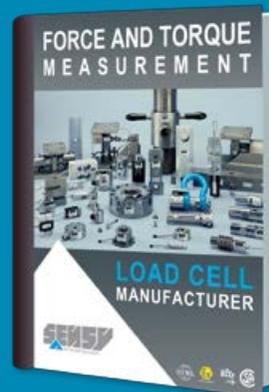
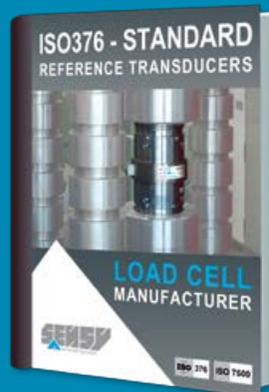
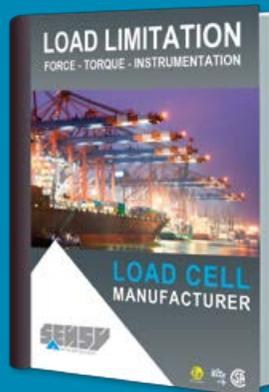
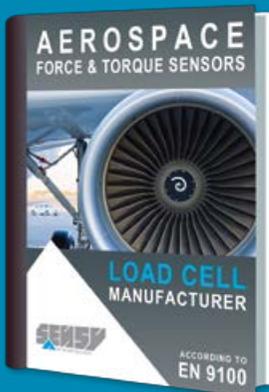


Load limitation  
in ATEX enclosure



Tension / Speed /  
Payout display

# OUR OTHER MARKETS



Z.I. DE JUMET - ALLÉE CENTRALE  
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