

## **SUSTAVI TERETA I BALASTA NA TANKERIMA SIROVE NAFTE**

- Tvornica turbina d.o.o. je upotpunila svoj proizvodni program brodskih parnih turbina razvojem nove generacije pumpi tereta i balasta kao bi ponudila kompletna rješenja za tankere sirove nafte sa nekoliko tankova.
- Ovi sustavi proizvedeni i isporučeni u Tvornici turbina sastoje se od parnih turbina, pumpi tereta, pumpi balasta pogonjenih el.motorima, plinonepropusnih osovinskih vodova, vakuum kondenzatora sa parnim ejektorom i rashladnom pumpom, pumpama kondenzata, separator vode na cjevovodu pare do turbina, te opremu za kontrolu i nadzor.
- Prezentacija će dati uvid u sve komponente sustava, svojih posebnosti i dobrih strana, sa posebnim naglaskom na nove familije pumpi tereta i balasta a uzimajući kao primjer sustav ispučen na 166,300 DWT Suezmax tanker sirove nafte izrađen u brodogradilištu Brodosplit, novogradnje 433 i 434.

## **CARGO AND BALLAST PUMP SYSTEMS FOR CRUDE OIL CARRIERS**

- Tvornica turbina d.o.o. has complemented its marine steam turbine production program by developing new generation of cargo and ballast pump families to offer complete cargo and ballast pumping solutions for crude oil tankers with few tanks.
- Such systems manufactured and delivered by Tvornica turbina consist of steam turbines, cargo pumps, el.motor driven ballast pumps, transmission gasstight shafts, vacuum condenser with steam ejector and cooling pumps, condensate extraction pumps, water separator on live steam pipelines to turbines and equipment for control and surveillance.
- Presentation will give insight into all system components, its specifics and advantages, with special look into new cargo and ballast pump families, by looking as example on system delivered on 166,300 DWT Suezmax crude oil tanker built in shipyard Brodosplit, newbuildings 433 and 434.