

STIPLA DNVGL - Update information

Version 2.3.1

DNVGL-PS

- Database version updated
- Attached excel sheets updated

Version 2.3.0

All programs

- New Stipla Main menu program
- New names for all programs based on DNVGL as main name
- Updated material database
- Updated theory manuals
- Material and profile data are now saved under C:\ProgramData\StruProg 2020\STIPLA DNVGL\
- Program installation under “StruProg 2020”
- Database files saved under C:\ProgramData\StruProg 2020\STIPLA DNVGL\

DNVGL-PS

- Capacity curve for scantling of stiffener based on WSD is now compared to max usage factor (UF) of 1.0
- Capacity curve for scantling of stiffeners is now only based on DNVGL-rule and not also on yield control
- Capacity curves: Input values for Lt implemented
- Capacity curves: psd corrected to always be given
- Capacity curves: Sigy-value reduced with 5 MPa
- Nsd for sniped stiffener is now calculated in the same way as for continuous stiffener, which means it also takes into account the stiffener area ($Nsd = \text{Sigx} * (As + st) + \text{Tau} * st$)
- For data base version, the moment factor for support/field (km1/km2) are now given in same order
- Stiffness control for web stiffeners is now updated where tw is the plate thickness

DNVGL-G

- Girder bracket calculations updated based on latest DNVGL Ship rules.
- Nsd for sniped girder is now calculated in the same way as for continuous stiffener, which means it also takes into account the girder area ($Nsd = \text{Sigy} * (Ag + It)$)

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- For data base version, the moment factor for support/field (km1/km2) are now in given in same order

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Version 2.2.1

DNVRPG

- Calculation of I_s for Taucel is now made if the stiffener spacing is changed without opening the stiffener window

Version 2.2

All programs

- Includes rule updates until July 2014
- Font on forms changed to Arial
- Theory manuals updated

DNVRPS

- New definition of lateral pressure; positive on plate side
- Flange eccentricity e_f corrected for BF-profiles (from $e_f = bf/2$ to $e_f = bf/2 - tw/2$)
- ($=km^3$) taken away on screen (moment factors for continuous girder)
- Shear lag only taken into account for laterally loaded stiffener
- No restriction for $C_{ys} \leq 1.0$ in eq 7.16
- Stiffness control if sniped stiffener corrected, ref eq 9.4
- Capacity curve for plate/ t_{min} corrected for WSD
- I_z for BF based on eq 7.33
- If $p_0 > p_{sd}$, then two load cases are run independently. The load case giving highest IR is presented as results.
- p_0 calculated for both stiffener spacing based on k_c/C_0 from eq 7.11 and 7.12
- Database version updated output

DNVRPG

- New definition of lateral pressure; positive on plate side
- Effective width of girder web based on ch 6.6
- Shear lag is only taken into account for laterally loaded girder.
- Taucel, Tauc_{eg}, C and p_0 are calculated for both sides of the girder
- Flange eccentricity e_f corrected for BF-girders (from $e_f = bf/2$ to $e_f = bf/2 - tw/2$)
- ($=km^3$) taken away on screen (moment factors for continuous girder)

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- Girder property in section class 4 is not reduced for slenderness (buckling) calculations. Only plate is reduced
- $M_{s2,Rd}$ now based on compression in girder flange (section class 4 profile)
- μ removed from Eq 7.62 and 7.63
- If $p_0 > p_{sd}$, then two load cases are run independently. The load case giving highest IR is presented as results.
- C_{ys} in eq 7.16 is not limited to 1.0.
- Database version updated output
- Database version updated with output if control only at point 2
- Database version updated with stiffener spacing printed before plate thickness in consistent with input
- For database version, all output of “Yes”/”No” without any space

Version 2.1

DNVRPS

- Capacity curve for plate scantling added
- t_{min} also calculated for $p_{sd} = 0$ based on primary structure
- stiffness control can be made for sniped stiffeners according to DNV-RP ch 9

DNVRP1

- Calculation corrected for σ_{ix} and/or σ_{iy} in tension

Version 2.0

All programs

- Direct link to homepage/E-mail from About form
- Download program from homepage
- Includes updates until Feb 2012
- Theory and Verification documentation now available from under Help menu
- Manual for database version now available under Help menu

DNVRPS

- Definition of e_f in fig 7-3 in DNV-RP is changed
- Welded L-profiles are now also possible to have an eccentric flange
- Capacity curve for stiffener can be plotted with constant shear and lateral load
- For sniped stiffener, the stiffness of stiffeners can be controlled according to DNV-RP
- Revised calculation for web reduction related to high shear forces ($V_{sd} > 0.5V_{rd}$)

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STIPLA DNVGL - Update information

DNVRPG

- Definition of e_f in fig 7-3 in DNV-RP is changed
- Welded L-profiles as girders are now also possible to have an eccentric flange,
- Revised calculation for web reduction related to high shear forces ($V_{sd} > 0.5V_{rd}$)
- User can choose to make the girder check only at midspan

Version 1.9

All programs

- Including amendments and corrections of the rules until nov 2009
- Updated Theory and verification manual
- Updated database versions for DNVP1, DNVRPS and DNVRPG
- Possible to use arrow keys for input of geometry and stresses

Program DNVRPS

- Bulb flat database now includes 50 profiles
- Explanation for Eq 7.52 corrected. Usage factor correct.
- Intermediate results are available on new form

Program DNVRPG

- Input of local forces M_1 , M_2 and V_1 is taken out
- Bulb flat database now includes 50 profiles
- Explanation for Eq 7.52 corrected. Usage factor correct.
- Intermediate results are available on new form

Version 1.8

All programs

- Compatible with Windows Vista.
- Min thickness for all profiles is now 0.1mm

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STIPLA DNVGL - Update information

- Including amendments and corrections of the rules until dec 2008
- Theory and Verification manual updated for DNVRPS and DNVRPG program

Program DNVRP1 - database

- Manual updated. Correction of chapter 1.3 – common input.

Program DNVRPS

- Identification and Project text now takes “,” and “.”
- Changed definition for e_f – eccentricity of flange, ref DNV, amendment dec 2008
- Theory and Verification manual updated

Program DNVRPG

- Stiffener profile I (tw) and T-profile (tw) error in input corrected
- Changed definition for e_f – eccentricity of flange, ref DNV, amendment dec 2008
- Theory and Verification manual updated