

命令模式

LBP length [/NOCHECK]

Sets a reference length for trim and waves.

设定船舶垂线间长作为纵倾和波浪参考。

LBP loc1, loc2 | loc1, locm, loc2 [/NOCHECK]

Sets reference locations defining the reference length for trim, waves, and deflection.

设定船舶垂线间长的首尾端点以及船中位置作为纵倾，波浪和总纵变形的参考。

LBP

Switches to LBP mode and displays the current reference length setting.

切换到 LBP 模式并显示当前参考长度的设定。

参数说明

length

Length over which trim is taken; also default wave and deflection length.

纵倾发生的长度范围，波浪长度或总纵变形的长度范围。

loc1, loc2

Longitudinal locations of the forward and aft "perpendiculars". These may be the forward and aft ends of the vessel, draft mark locations, etc. The length is taken to be the difference.

艏艉垂线的纵向坐标，也可能是船舶的艏艉端点坐标，或前后吃水标尺位置坐标等，垂线间长为位置坐标之差。

locm

Location of the "middle perpendicular" which must lie between l1 and l2.

舫垂线位置，必须位 l1 和 l2 之间。

/NOCHECK

Skips checking whether the specified length is sufficiently close to the length overall.

跳过检查设定的长度是否接近于船舶总长。

Operation

操作

When the program begins, the "LBP" is undefined. While it is undefined, any attempt to use it as a trim reference or wave length will be rejected.

当程序开始时，如果不定义"LBP"，任何需要"LBP"作为纵倾和波浪参考的要求都会被拒绝。

All trim values are reported in degrees while the "LBP" is undefined.

如果不定义"LBP"，所有的纵倾值都会以度来表示。

After the LBP command has been given with a nonzero length value, trim is reported as a distance over length; ie. trim distance / length = $\tan \theta$

如果 LBP 命令定义了长度（且非 0），纵倾会表示为：首尾吃水差/垂线间长

where θ is the trim angle.

θ 为纵倾角度

Optionally, the two locations loc1 and loc2 may be given, in which case the length is taken as the difference between them (the order in which they are given does not matter). The "TO" connective is optional (a comma or space works as well).

也可以设定参考长度的端点位置 loc1 和 loc2, 参考长度便为两端点位置 loc1 和 loc2 的差值(和 loc1 与 loc2 给定的顺序没有关系)。连接词"TO"是非必选项（用逗号或空格代替也可以）。

When the LBP "ends" are defined, the STATUS command uses them to report draft, and wherever drafts are taken as input the end locations may be referenced in the DRAFT command by the keywords FP, AP, and MS (for the midlength location between FP and AP). FP and AP are also stored as system variables.

当定义了参考长度的两端点后，STATUS 命令会引用它们来报告吃水，吃水位置可以引用关键词 FP, AP 和 MS 来表示（MS 表示艏艉垂线的中间位置）。FP 和 AP 也可以定义为系统变量。

The WAVE command will use the LBP length as the wave length if the wave length parameter is omitted. (In this case only, LBP is applied parallel to the actual waterplane.)

如果不设定波浪的长度参数，WAVE 命令会利用 LBP 长度作为波长。（这种特定条件下，LBP 长度是平行于实际水面的长度。）

Deflection, when derived from drafts, is based on the FP and AP locations when these locations have been defined by the LBP command. (See the DRAFT command.)

LBP 命令定义了 FP 和 AP 位置后，总纵弯曲变形，可以用吃水来表示，吃水会基于 FP 和 AP 位置来表示。（查看命令 DRAFT）。

Giving Im assigns a mid perpendicular (MP) location, stored in system variable MP. If defined, the MP location is used in place of MS for the triple drafts in Load Editor's screen header. Like FP and AP, MP can be specified after "DRAFT @" in commands like CC, DRAFT, GHS, HS, and MAXVCG.

设定 MP 舳垂的位置，被保存为系统变量 MP。如果定义了 MP，在工况编辑中，MP 会代替 MS，显示在装载编辑器的顶端。在命令 CC, DRAFT, GHS, HS, 和 MAXVCG 中，FP, AP 和 MP 会放在 DRAFT @后，以显示该位置的吃水。

Supplying length as 0 or "OFF" returns it to the undefined state.

设定垂线间长为 0 或 OFF，会关闭 LBP 长度的定义。

The LWL command is essentially similar to the LBP command, except for the following two side effects: 1) When an LBP is in effect, it is the length used for the Coefficient of

Form calculations (except waterplane coefficient); the LWL command permits the true waterline length to be used.

2) When FP and AP have been defined with the LBP command, the Load Editor displays three drafts (at FP, MS and AP) and omits the trim angle display.

These side effects can be switched between "LBP mode" and "LWL mode" simply by giving the command without parameters.

命令 LWL 和 LBP 相似，区别在于下面两个方面：1) LBP 长度可以用来做船型系数的计算(排除水线面系数)，LWL 命令可以采用实际的水线长度。2) 当 LBP 命令定义 FP 和 AP 位置后，工况编辑界面会显示 3 个不同位置的吃水值 (FP, MS ,AP)，省略纵倾角度显示。

"LWL mode"和"LBP mode"间可以任意的切换，通过给定命令 LWL 或 LBP，不附加参数，就可以相应的切换到 LWL 或 LBP 模式。

Display Output

输出显示

When issued without a parameter, the LBP command displays (on the screen only) the current setting, ie. the value last given with an LBP or LWL command.

只是运行命令 LBP 不附加参数时，会屏幕显示当前的 LBP 设定，及最后一次赋予 LBP 的参数。

Nondisplay output:

无显示输出

none.

无

Examples

样例

Defining a reference length:

定义参考长度。

LBP = 100

Undefined the reference length:

关闭参考长度定义。

LBP OFF

Defining both perpendiculars:

定义艏艉垂线位置。

LBP = 0, 100a

Switching from "LWL mode" to "LBP mode"

从"LWL mode"切换到"LBP mode"

LBP