

## 命令模式

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LSLIMit SHR | MMT [:MIdrange] | TOR = v1 [@ l1, ..., vn @ ln]

Establishes the maximum allowable shear, bending moment, or torque values as a function of the longitudinal position on the vessel.

设定船舶纵向方向上不同位置的切力，弯矩或扭矩的许用值。

LSLIMit OFF

Turns the limits off.

关闭许用值限制

LSLIMit Title title

Changes the title of the current longitudinal strength criterion.

改变当前总纵强度标准标题。

LSLIMit

Display the current limits for shear, bending moments, and torque.

显示当前切力，弯矩和扭矩的许用值。

## 参数说明

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SHR

Specifies that the  $v_i$  values given are for shear.

指定数值  $v_i$  为切力。

MMT [:MIDRANGE]

Specifies that the  $v_i$  values given are for bending moments. If MIDRANGE is present, limit percentages are based on the midrange between the minimum and maximum bending limits at each longitudinal location. The default range is from zero to the minimum (if moment<0) or maximum (if moment>0), except midranges are used by default when the minimum and maximum limits have the same sign (or either is zero) at any point on the limit curves.

指定数值  $v_i$  为弯矩。如果存在 MIDRANGE，则许用值百分比介于每个纵向位置的最小和最大之间的中间范围。默认范围是从 0 到最小值(如果弯矩为<0) 或者从 0 到最大值(如果弯矩>0)，但当最小和最大限值在极限曲线上的任意点具有相同的符号(或任一为零)时，默认使用中间范围。

TOR

Specifies that the  $v_i$  values given are for torque.

指定数值  $v_i$  为扭矩。

$v_i$

The maximum allowable shear (in current weight units) or bending moment (in current weight times length units) or torque (in current weight times length units) depending on whether SHR, MMT or TOR is specified. For SHR and MMT, two limits (one positive, the other negative) may be given and separated by the ampersand (&) character. For

MMT, the same sign may be used for both maximum and minimum bending limits (but only where the actual bending moments cannot switch sign), in which case the minimum limits have no effect except to appear on the plot for comparison with the actual bending moment curve. Limits are ignored in the indicated direction by specifying "INFINITY" or "-INFINITY" at a location.

vi 可以为切力许用值（当前重量单位）或弯矩许用值（当前重量单位乘长度单位）或扭矩许用值（当前重量单位乘长度单位），取决于前面的指定 SHR, MMT 或 TOR。对于切力和弯矩，可能给定两个许用值（正数和负数），用&分隔。对于弯矩，最大和最小的许用值可能正负相同，此时，可以只提供一组正数许用值，但对于实际的弯矩分布和正负值无任何影响。在某位置通过指定 "INFINITY" 或 "-INFINITY" 来忽略此位置的许用值的正负值(方向)。

li

The longitudinal location at which the preceding vi value applies.

使用前面定义的 vi 值的纵向位置。

title

A stability criterion description or other title up to 35 characters long.

稳性横准描述或其它的标题，最多为 35 个字符。

## Operation

### 操作

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LSLIMIT sets limits for comparison with the shear and bending moments computed by the LS command or torque computed by the TORQUE command.

命令 LSLIMIT 设定许用值，用于和命令 LS 计算的切力和弯矩或命令 TORQUE 计算的扭矩做比较。

When limits are defined and the LS or TORQUE command includes the /LIM parameter (or /PERCENT for LS), the results are shown as a percentage of these limits. However, when MMT:MIDRANGE is in effect (either explicitly or by default), percentages are calculated by:

LS 或 TORQUE 命令包含 /LIM 参数（或 LS 的 /PERCENT）定义许用值时，结果将显示为这些许用值的百分比。但是，当 MMT: MIDRANGE 生效（显式或默认）时，百分比的计算公式为：

$$100*(2*result-highlimit-lowlimit)/(highlimit-lowlimit)$$

Both minimum and maximum limits may be specified; otherwise, the negative limits are assumed to have the same magnitude as the specified positive limits.

最大和最小的许用值都应该被设定，否则，默认负的许用值的绝对值和正的许用值相等。

Shear limit magnitudes must not be less than 0.279 LT or 0.284 MT. Moment and torque limit magnitudes must not be less than 0.279 LT-Ft or 0.087 MT-m. (except when using moment midranges, the range width must not be less than twice this value).

许用剪切力幅度不得小于 0.279 LT 或 0.284 MT。许用弯矩和扭矩幅度不得小于 0.279 LT-Ft 或 0.087 MT-m。（除非使用中间范围的弯矩时，范围宽度不得小于此值的两倍）。

## Display Output

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## 显示输出

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LSLIM used without parameters displays the current limits for shear, bending moments, and torque.

运行命令 LSLIM 无附加参数时，会显示当前的切力，弯矩和扭矩的许用值。

## Nondisplay Output:

### 无显示输出

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none.

无

## Examples

### 样例

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Specifying a single shear limit over the entire length of the vessel.

设定船长范围内的切力许用值。

```
LSLIM SHR = 1000
```

Specifying bending moment limits at multiple longitudinal locations.

设定不同纵向位置上的弯矩许用值。

```
LSLIM MMT = 10000 @ 0, 12000 @ 25, 12450 @ 50, 11950 @ 75, 10000 @ 95
```

Specifying that the LS command report shear and bending moments as a percentage of the limits specified with the LSLIM command at prescribed longitudinal locations.

根据命令 LSLIM 设定的切力和弯矩的许用值，命令 LS 用许用值的百分比来报告显示指定肋位处的切力和弯矩值。

```
LSLIM SHR = 1000 @ 0, 1500 @ 100, 1000 @ 200
```

```
LSLIM MMT = 10000
```

```
LS /PER /FRA
```

Specifying both positive and negative bending moment limits and calculating the percentages based on zero percent for the middle of the range at each location:

设定正负弯矩许用值。

```
LSLIM MMT:MIDRANGE = -10000 & 12000 @ -40,  
-11000 & 15000 @ -10  
- 9000 & 16000 @ 20  
-10000 & 15000 @ 50
```