



Steve Skinner, Eaton Hydraulics, Havant, UK

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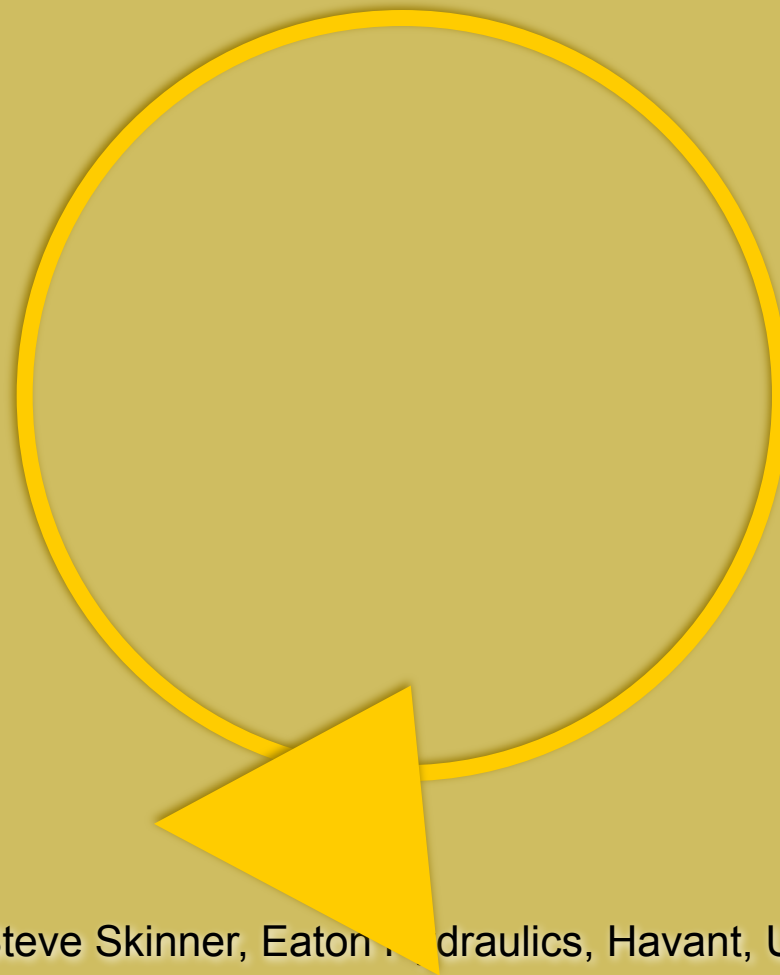
Steve Skinner, Eaton Hydraulics, Havant, UK

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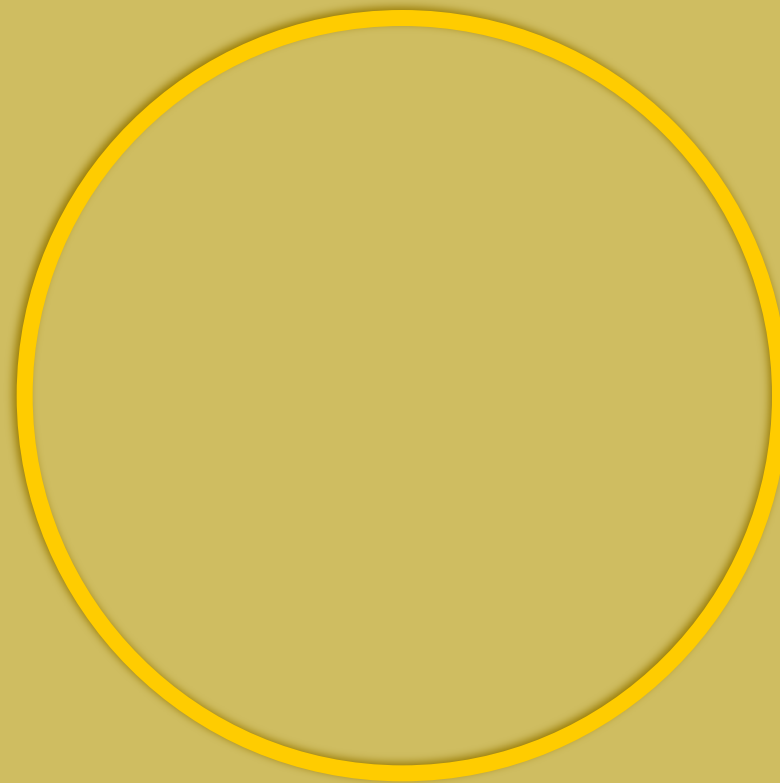
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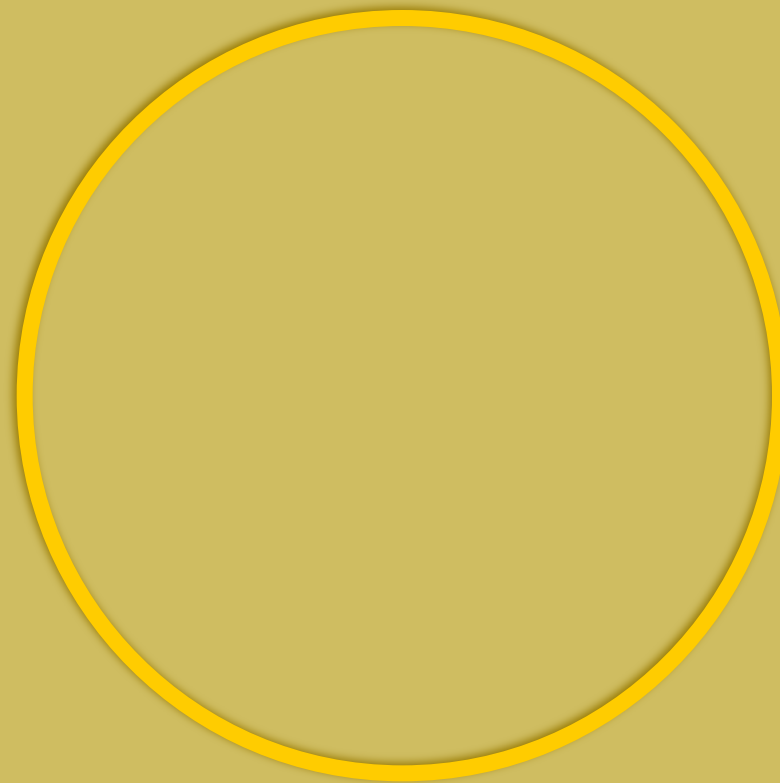


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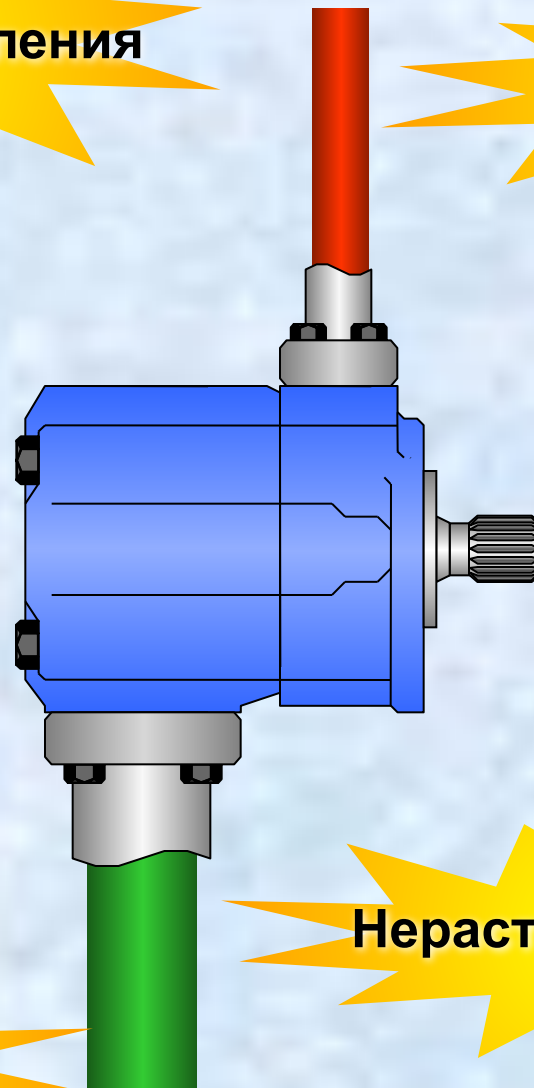


Steve Skinner, Eaton Hydraulics, Havant, UK

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**Пульсации давления**

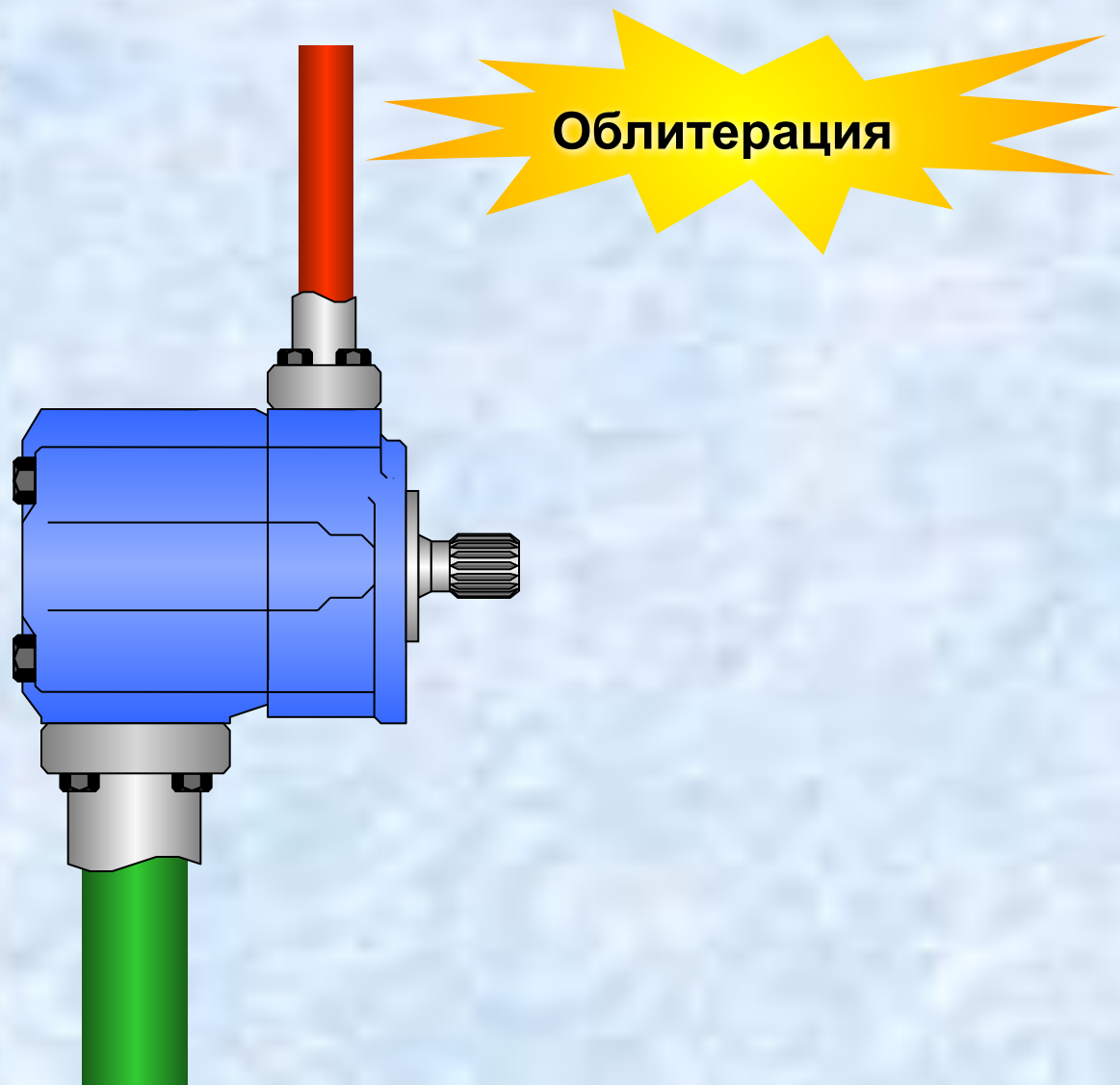
**Облитерация**



**Кавитация**

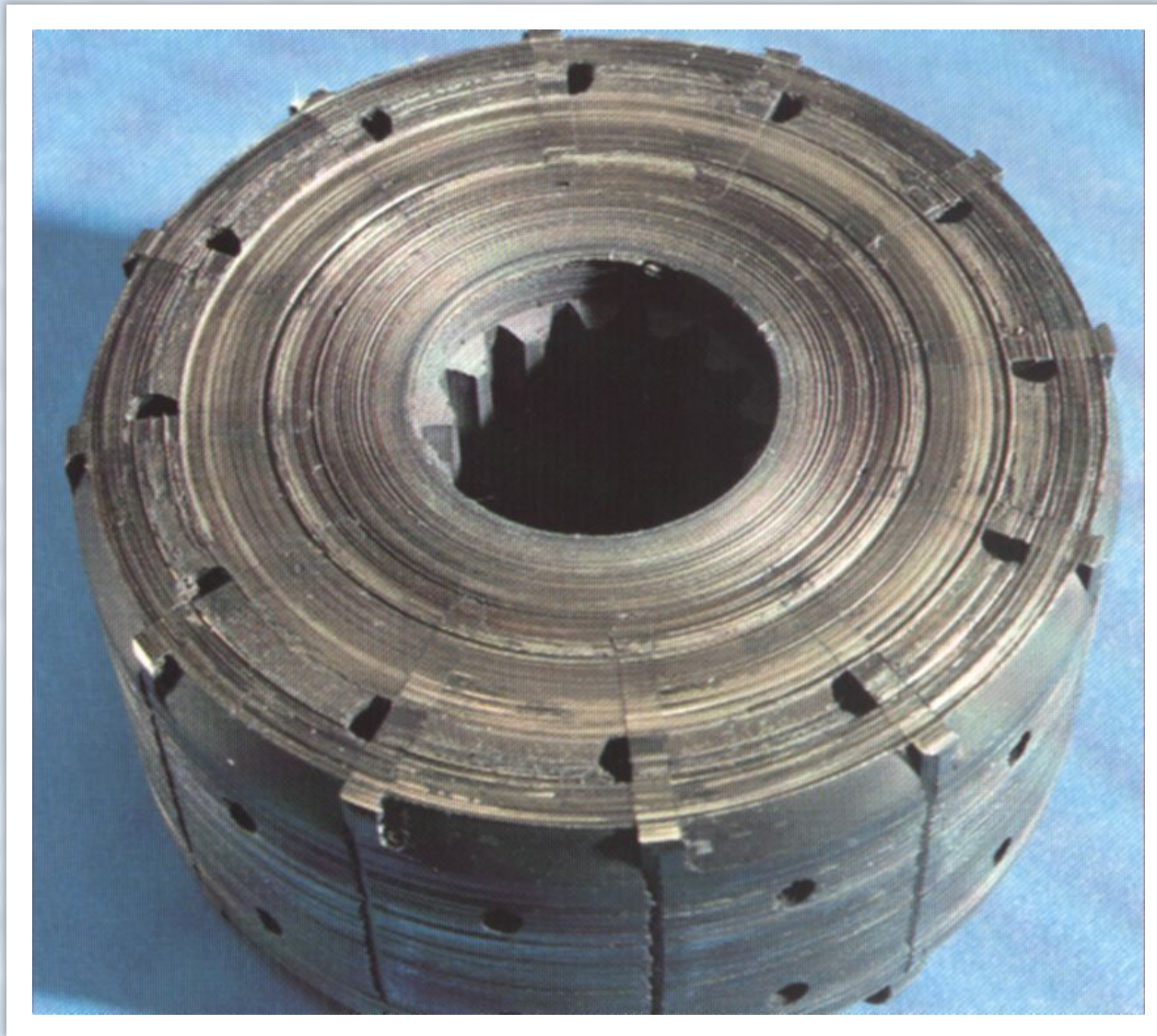
**Нерастворенный воздух**





**От 70 до 90% всех отказов в гидравлической системе связаны с плохой подготовкой рабочей жидкости.**

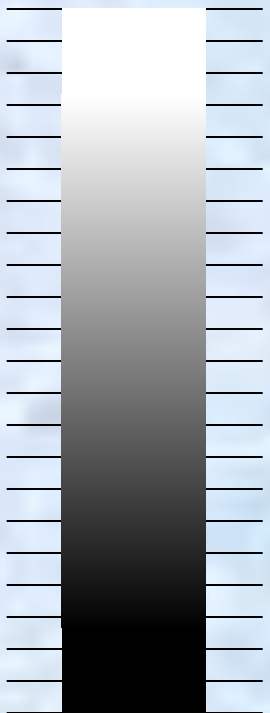




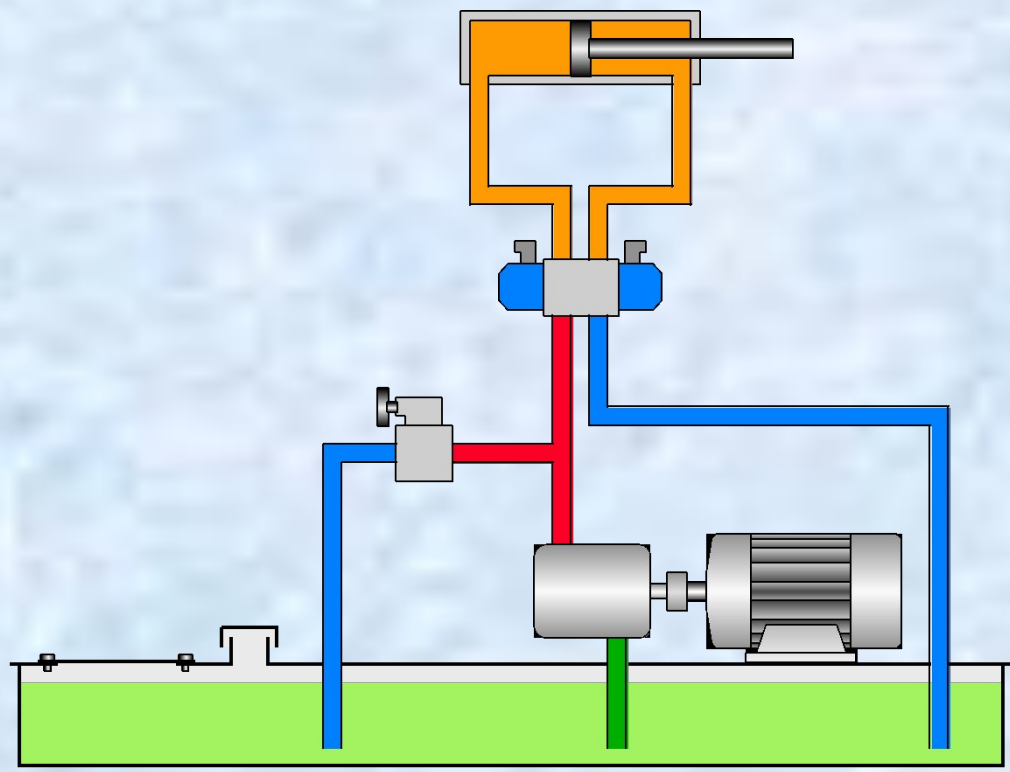
**Требуемое значение**

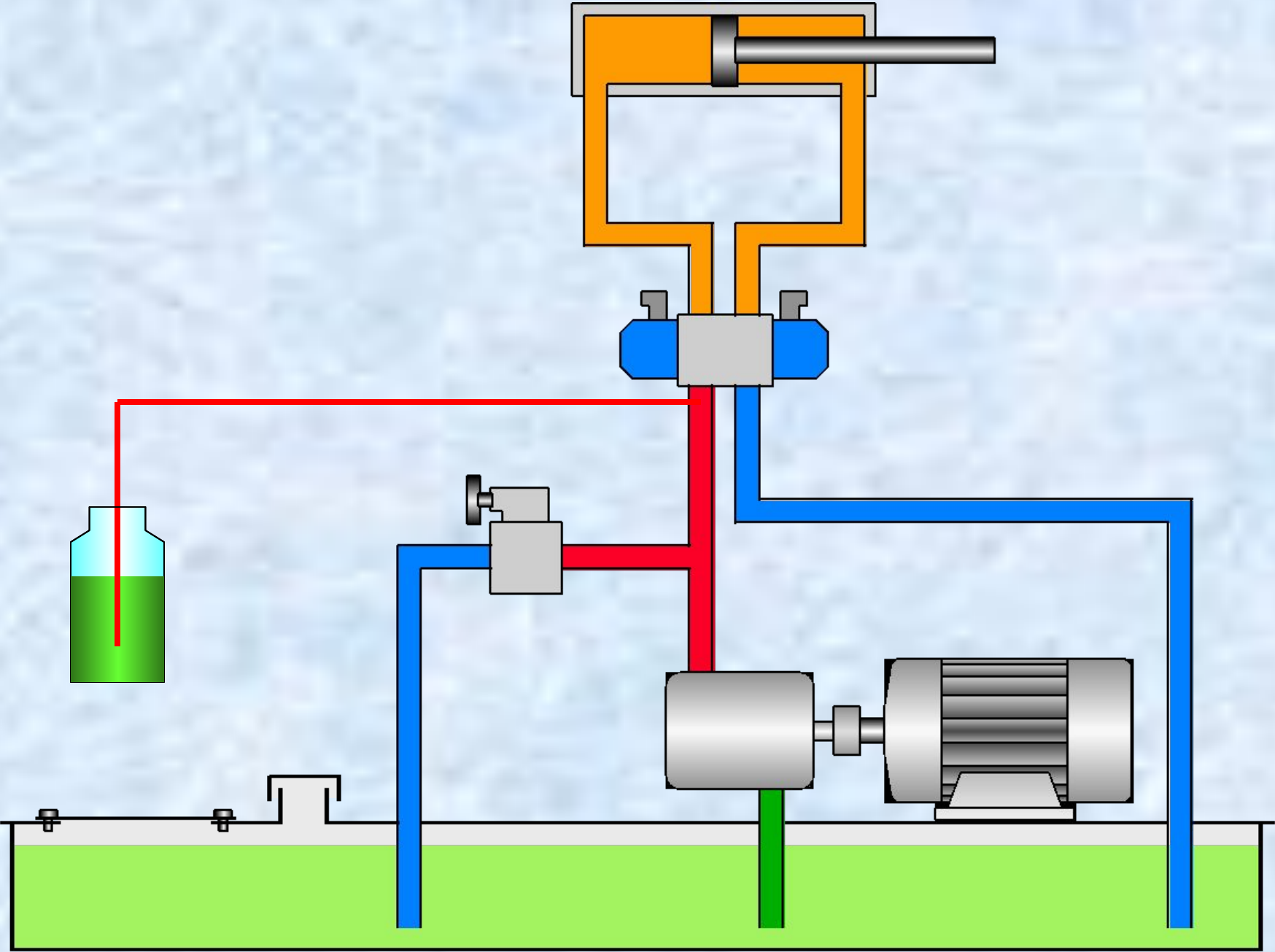
**Текущее значение**

Очищенная



Загрязненная





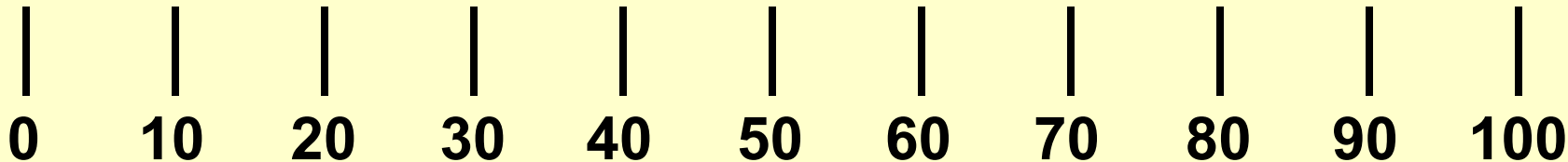
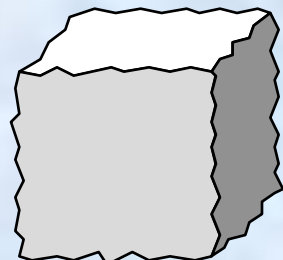
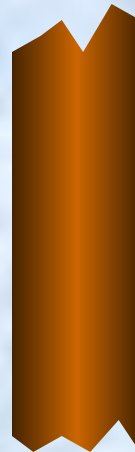
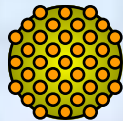
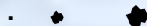
**1 Микрометр ( $\mu\text{m}$ ) = 0.000001 Метр = 0.001 миллиметр**



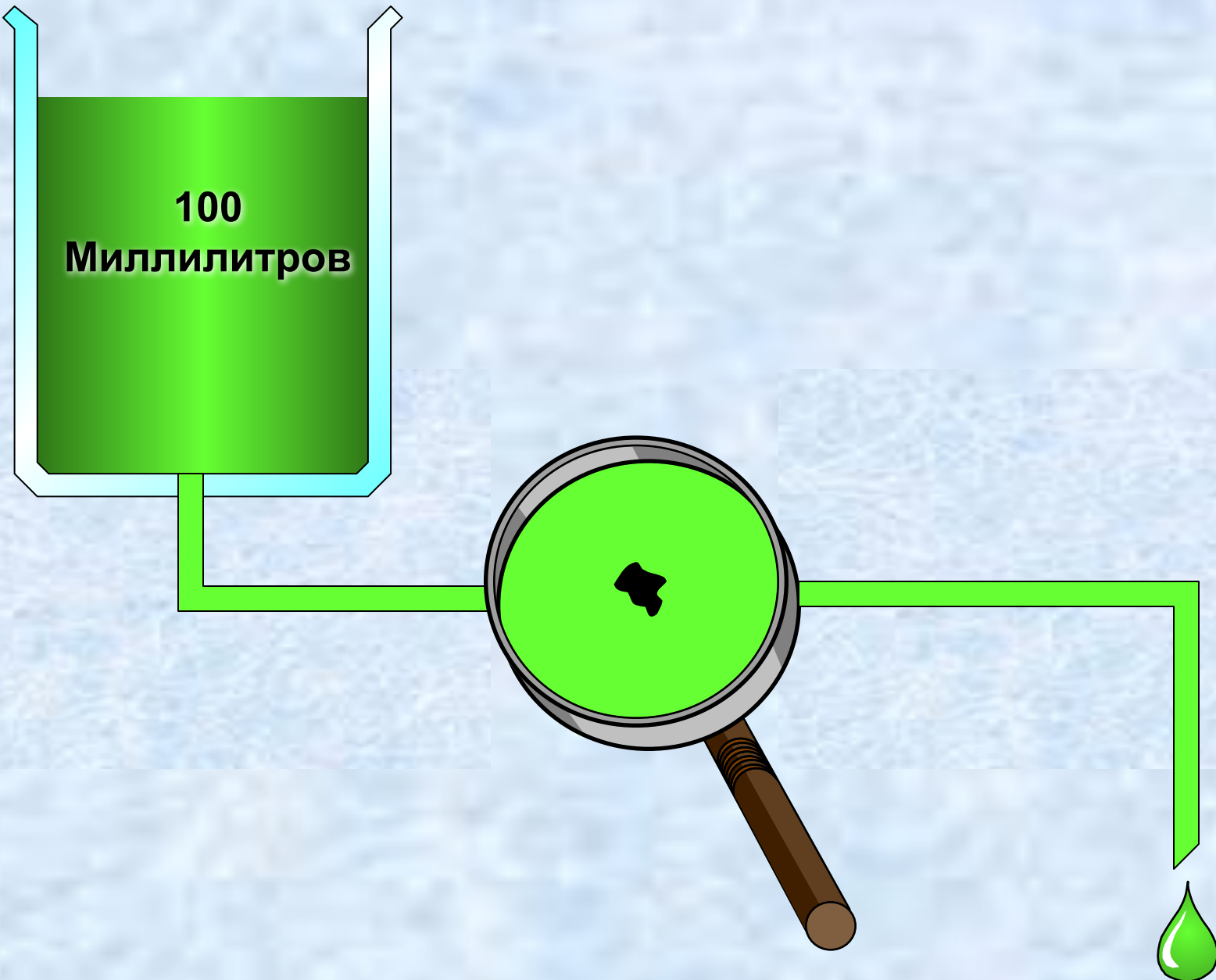


Человеческий  
Пыльца волос

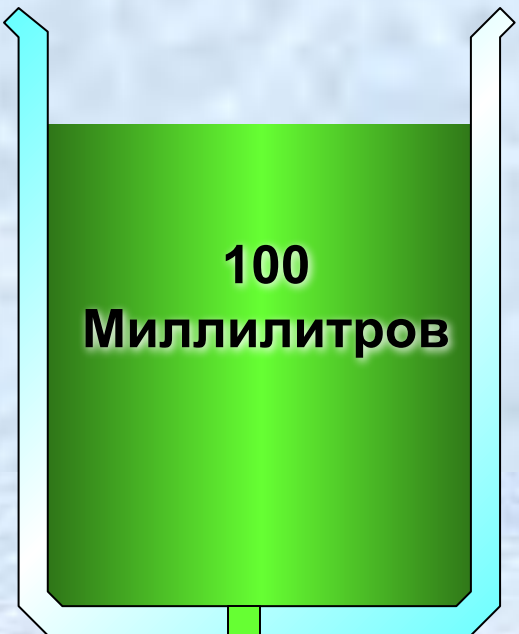
Кристалл  
соли



Микрометр







> 2  $\mu m$

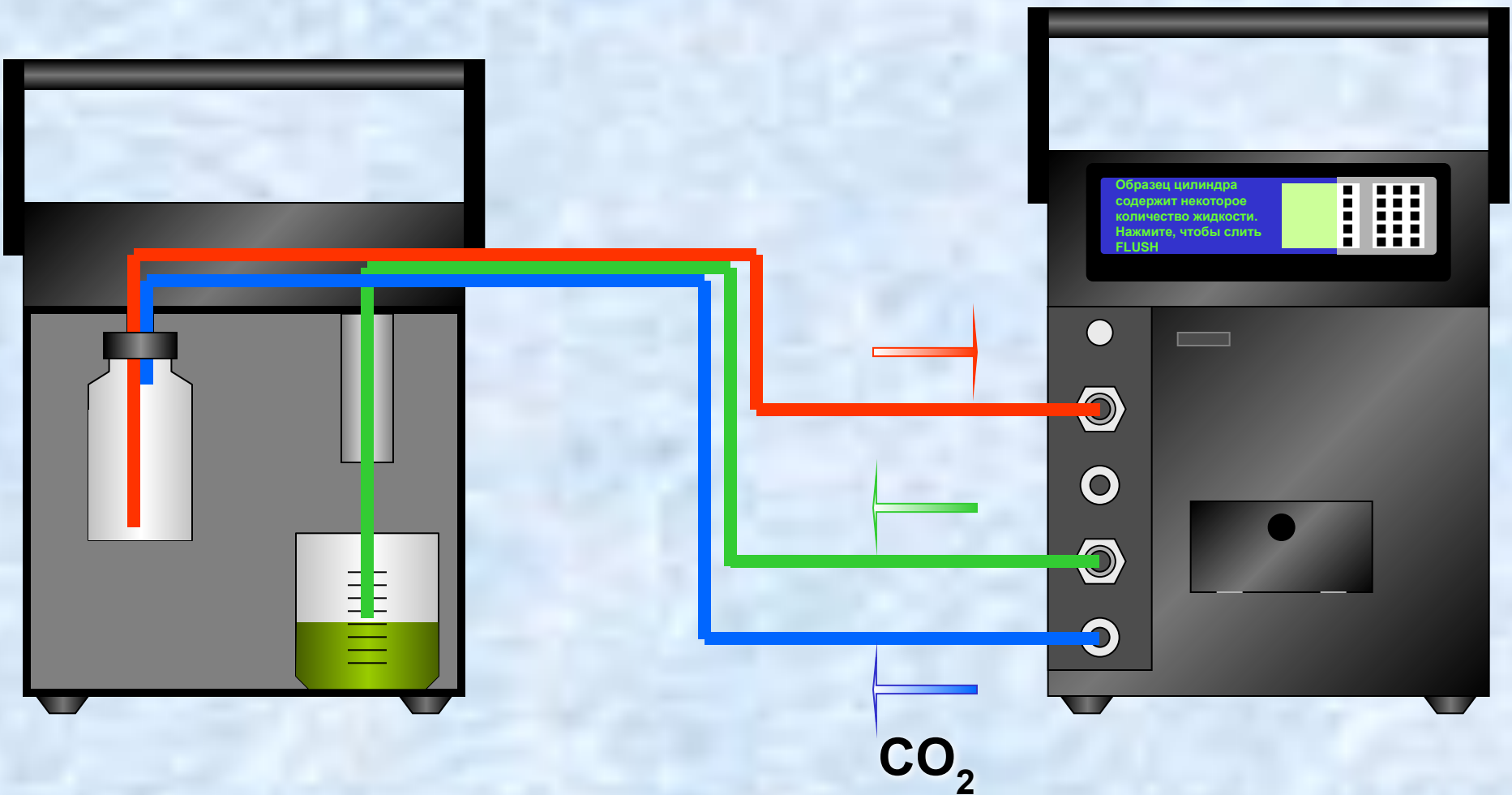


> 5  $\mu m$

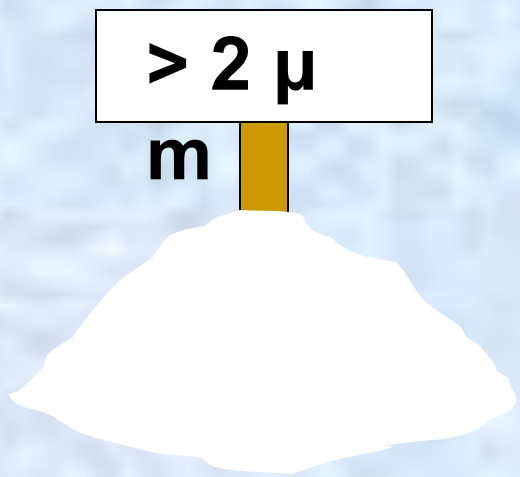


> 15  $\mu m$

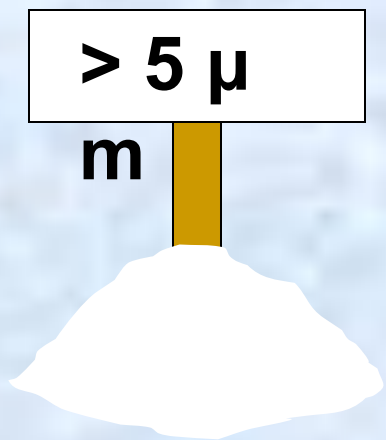




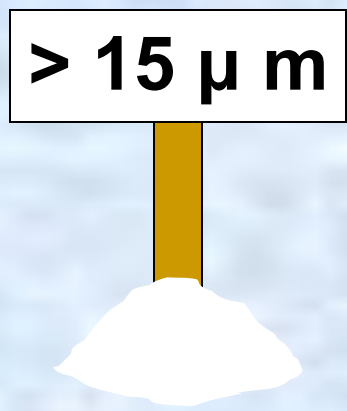




**3250**



**860**



**122**

Пример:  
на 100 мл

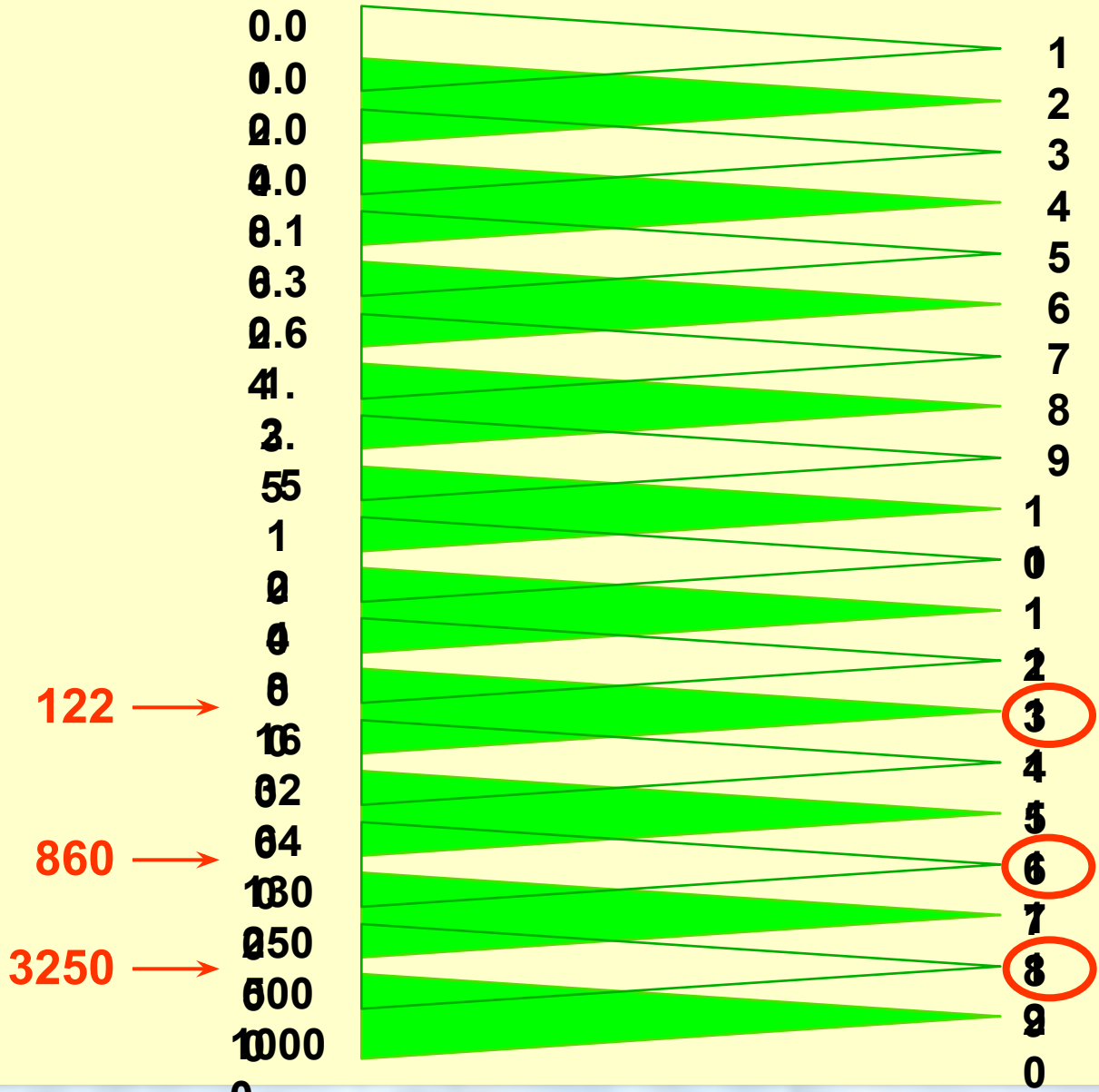
**Целевая программа фирмы VICKERS**

Проба: Двигатель № 1  
 Дата: 8.1.99  
 Объем пробы: 30мл  
 Расход: 50 - 25 мл/мин  
 Полученные значения: Кол-во частиц / мл  
 ISO: 22/17/13  
 NAS: 8

	Мин	Макс	Среднее	значение
2μm	3214	3285	3250	
5 μm	832	887	860	
15 μm	119	124	122	
25 μm	7	12	9	
50 μm	0	1	0	
100 μm		0	0	0

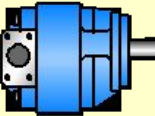
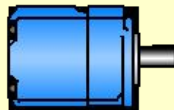
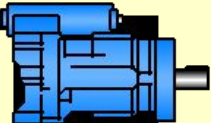
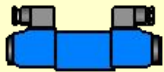
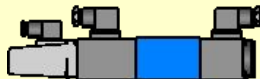


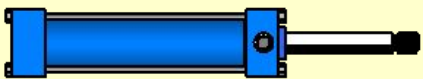
**Количество частиц/мл**

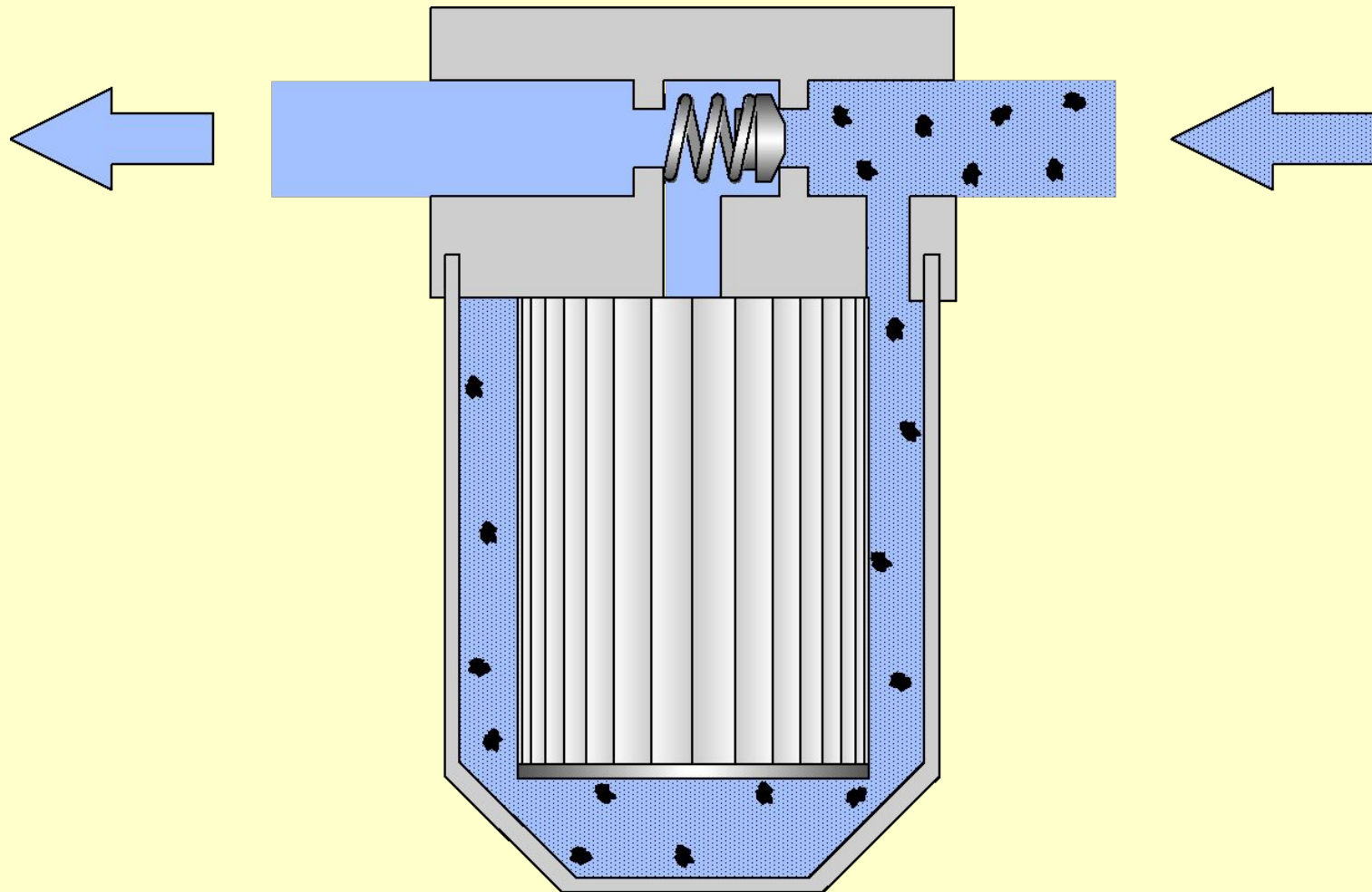
**Код**

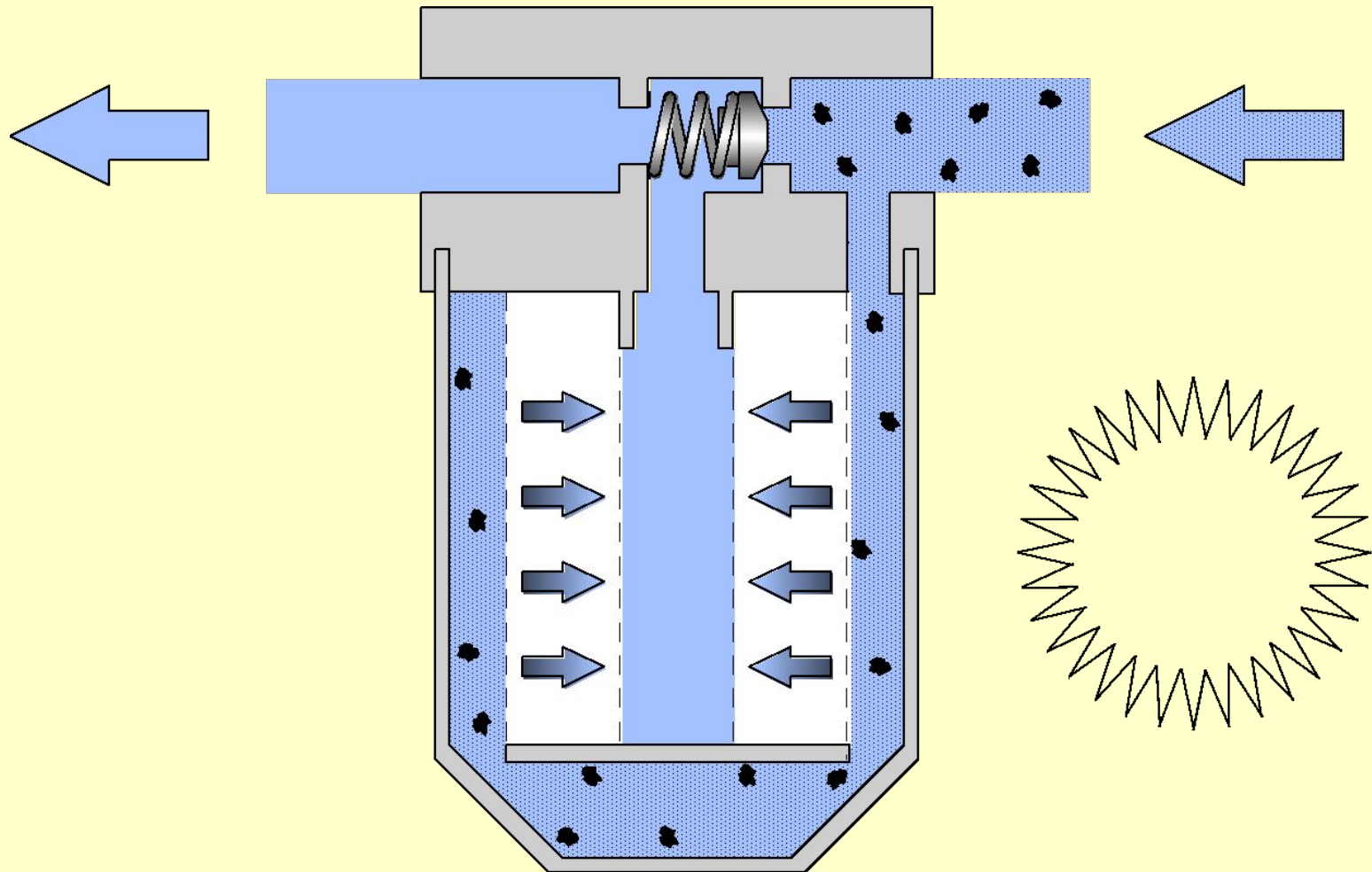


**ISO 4406**  
**Код**  
**19 / 17 / 14**

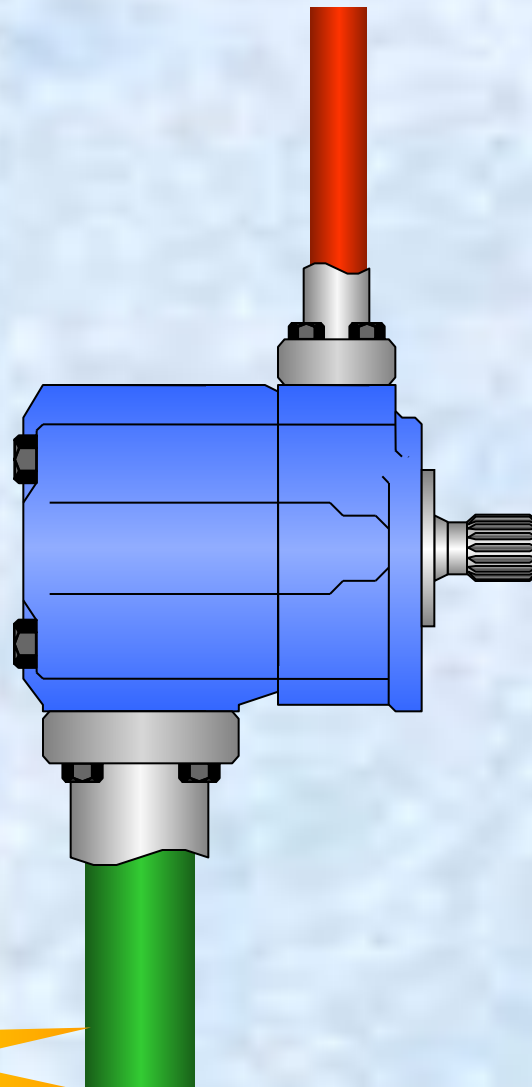
# Кодировка загрязнений ISO

	P < 140 bar	P < 210bar	P > 210 bar
	20/18/15	19/17/15	18/16/13
	20/18/15	19/17/14	18/16/13
	18/16/14	17/15/13	16/14/12
		20/18/15	19/17/14
		18/16/13	17/15/12
		20/18/15	19/17/14
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	20/18/15	20/18/15	20/18/15

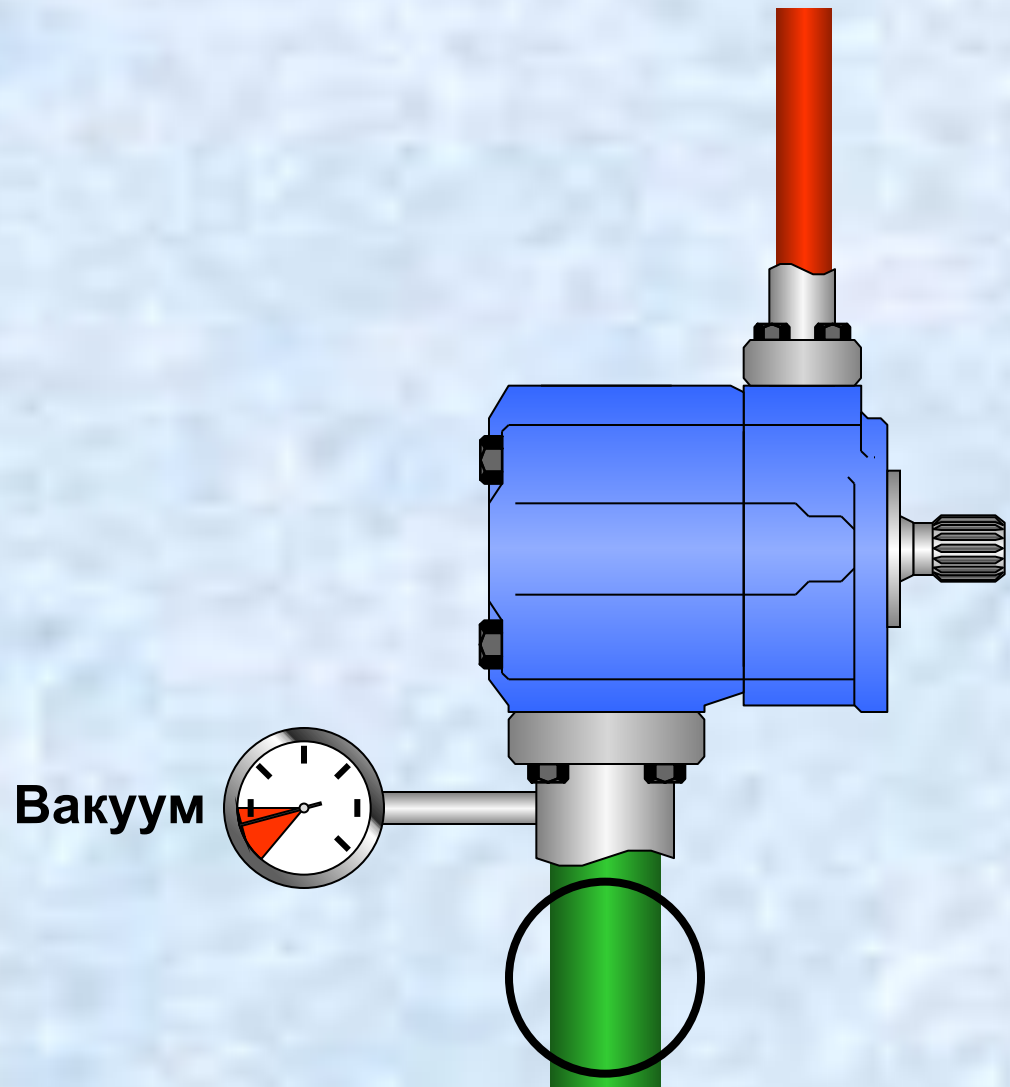


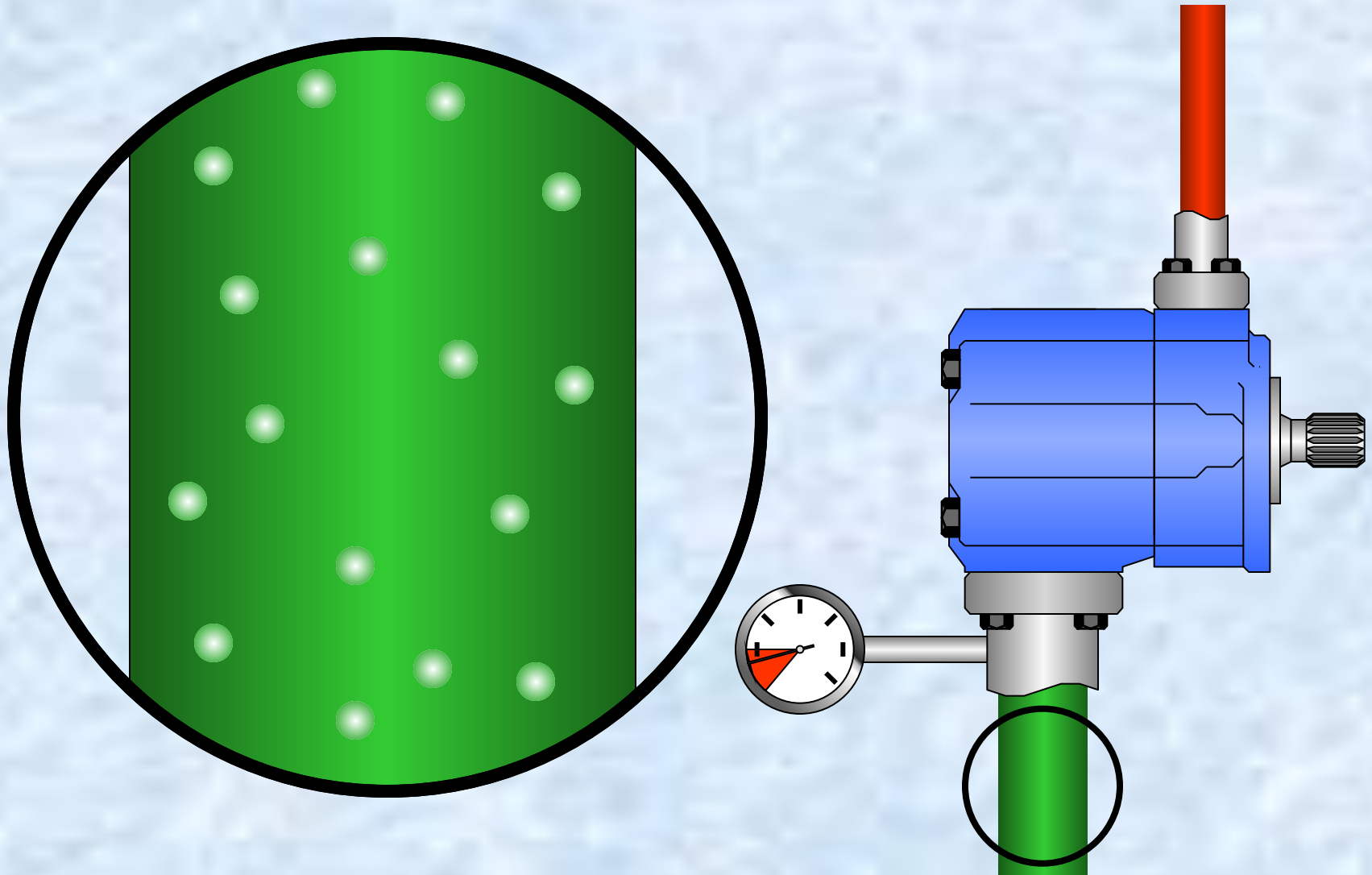


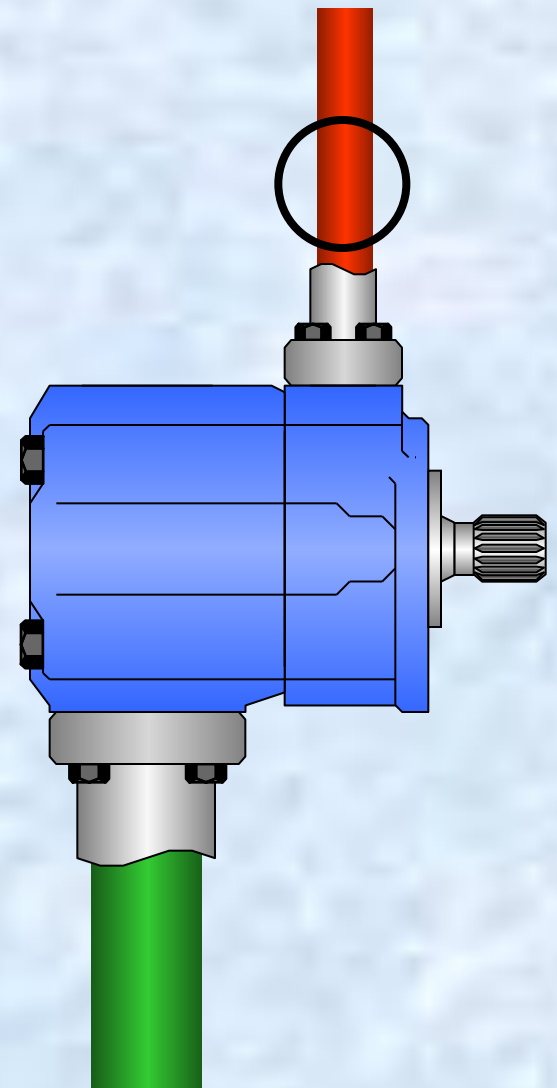
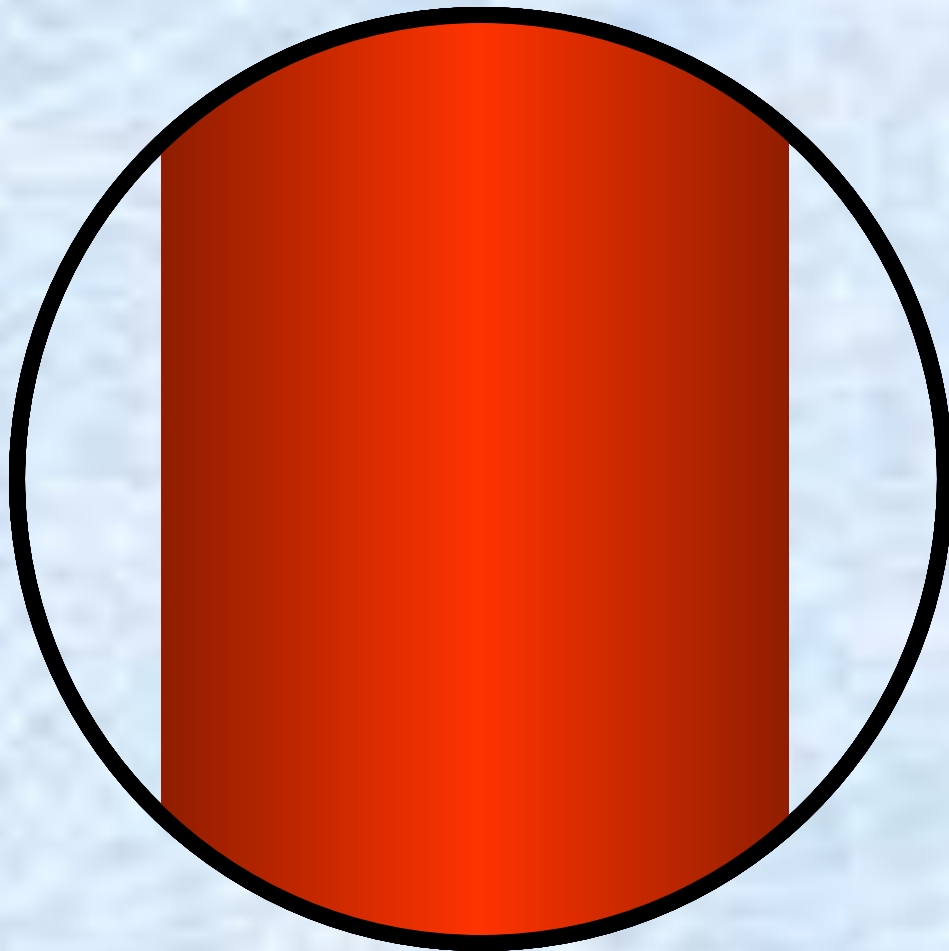




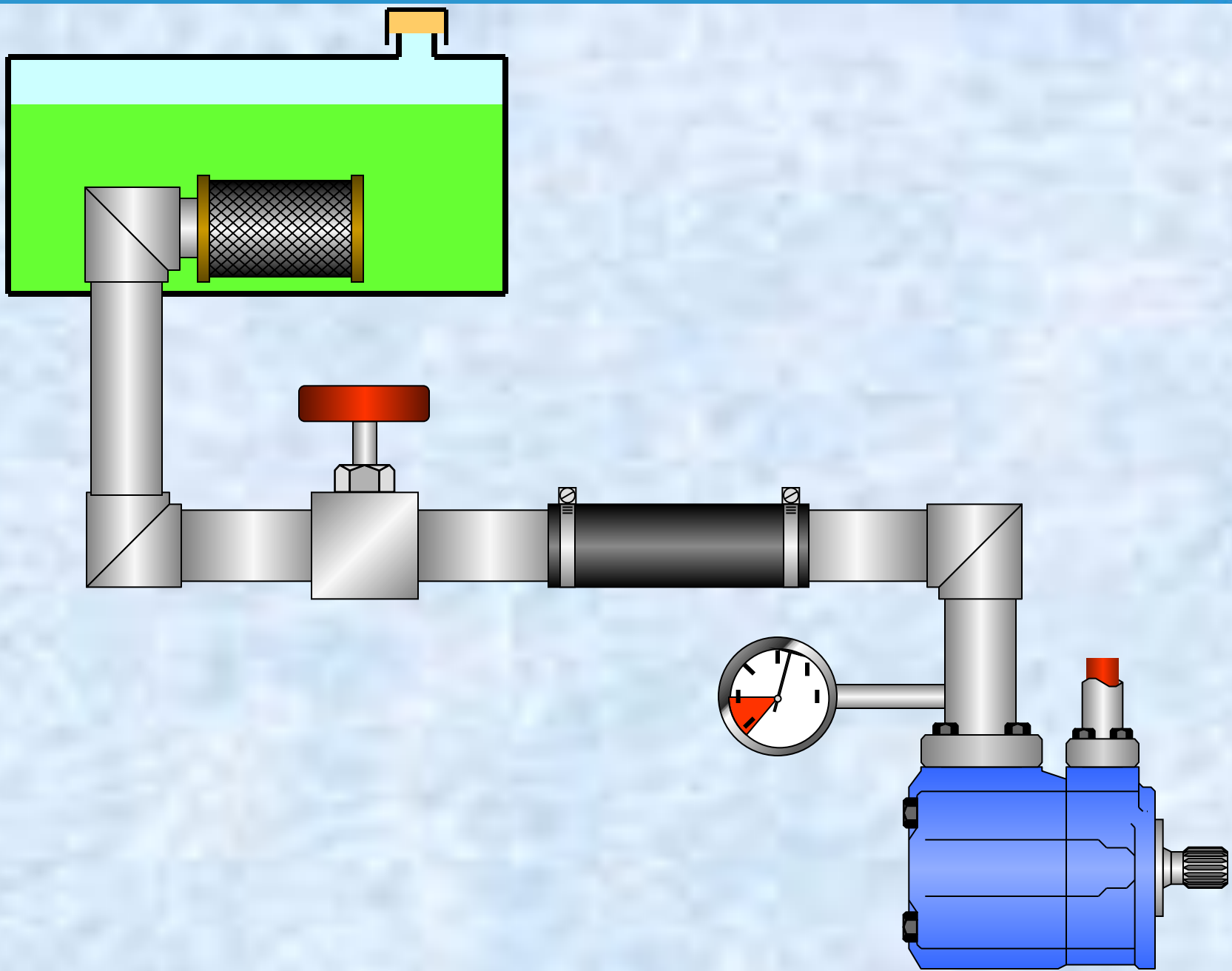
**Кавитация**

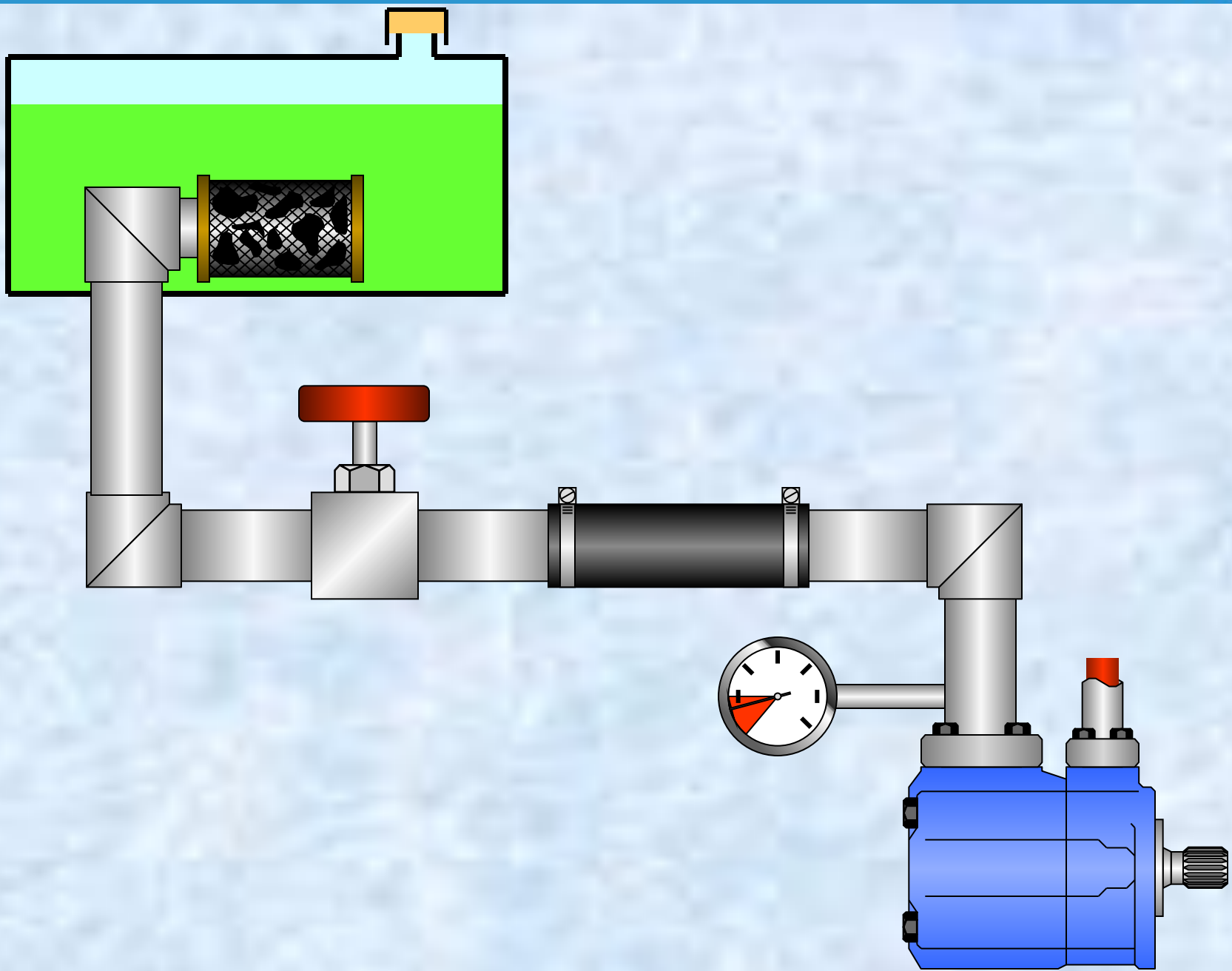




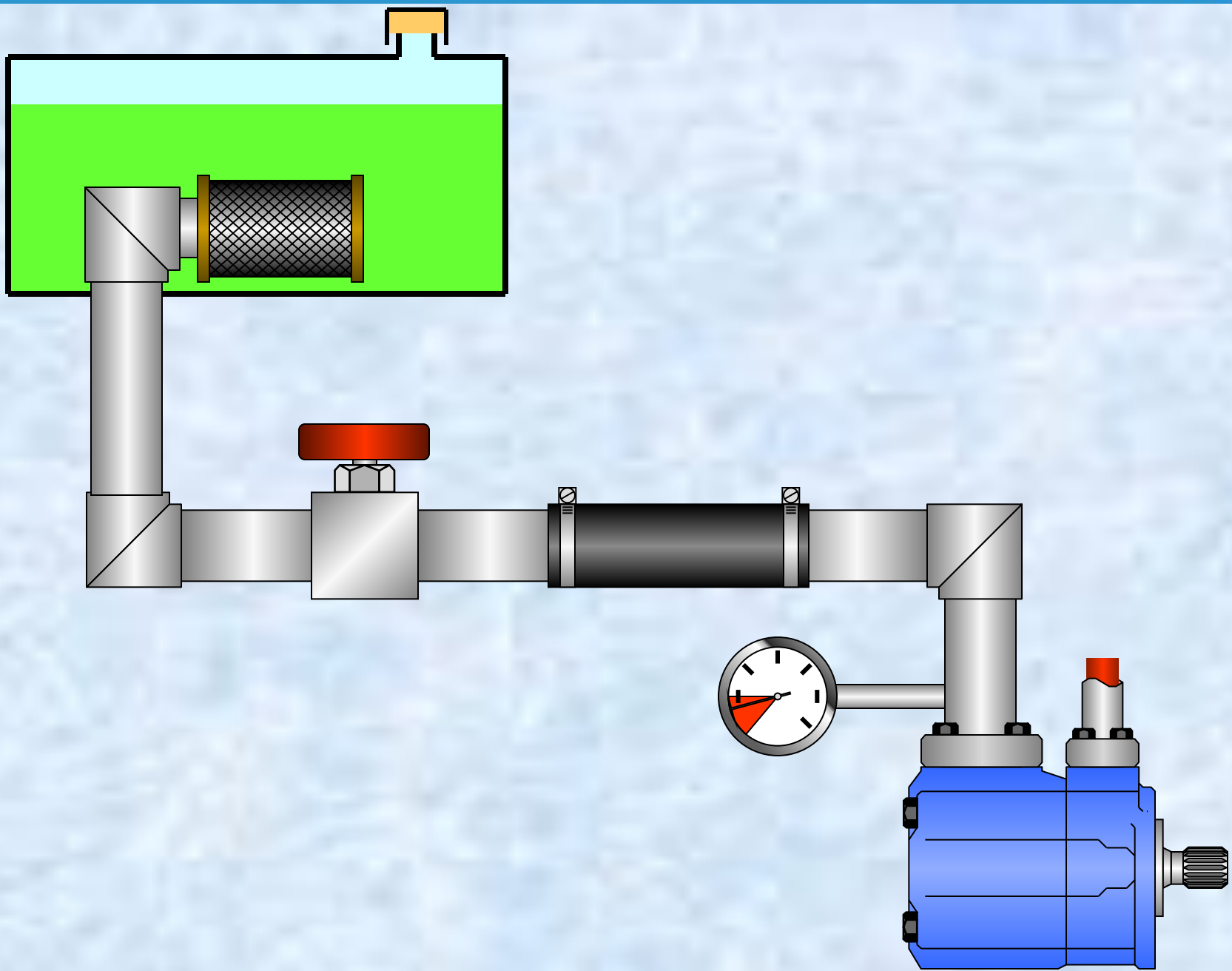




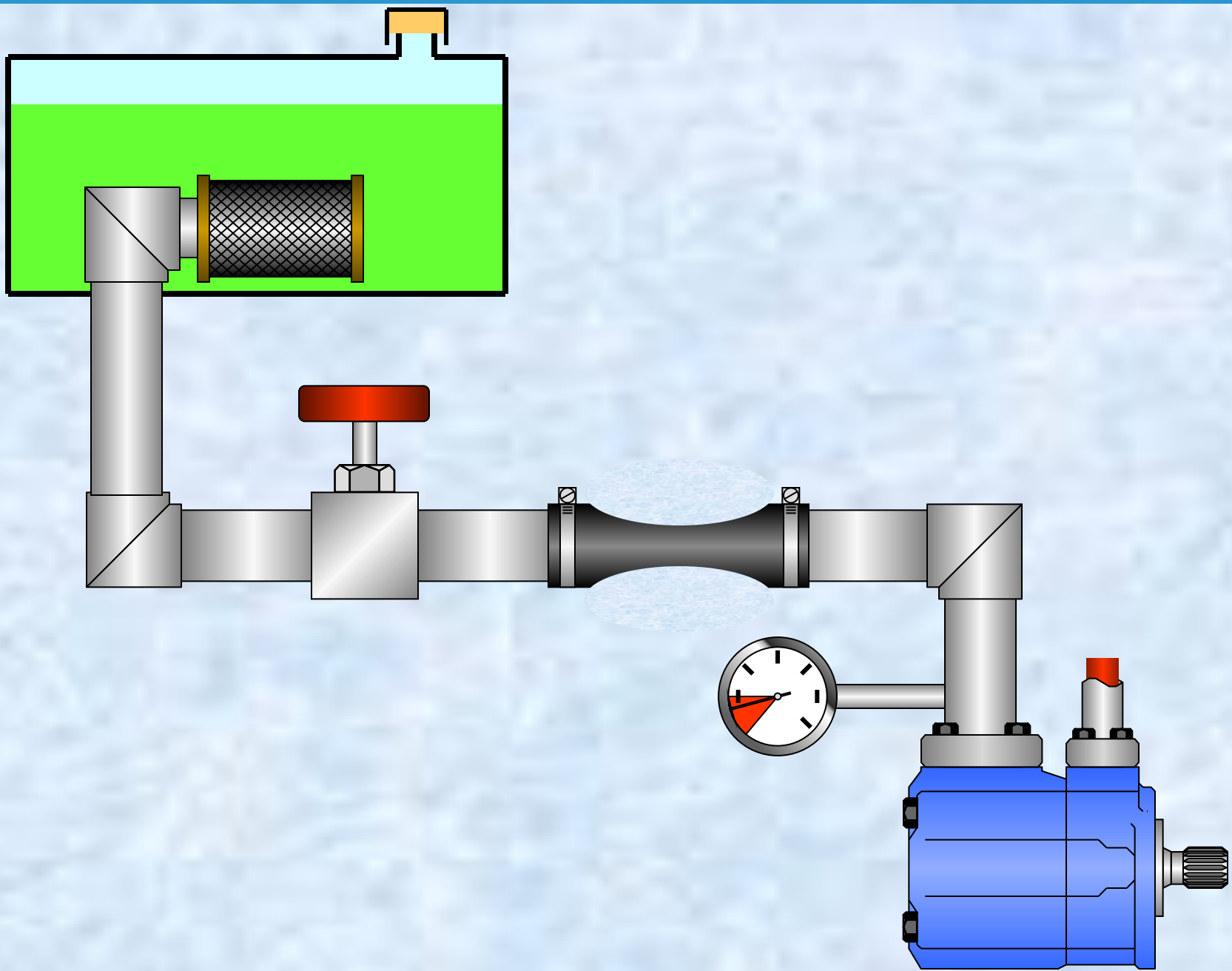


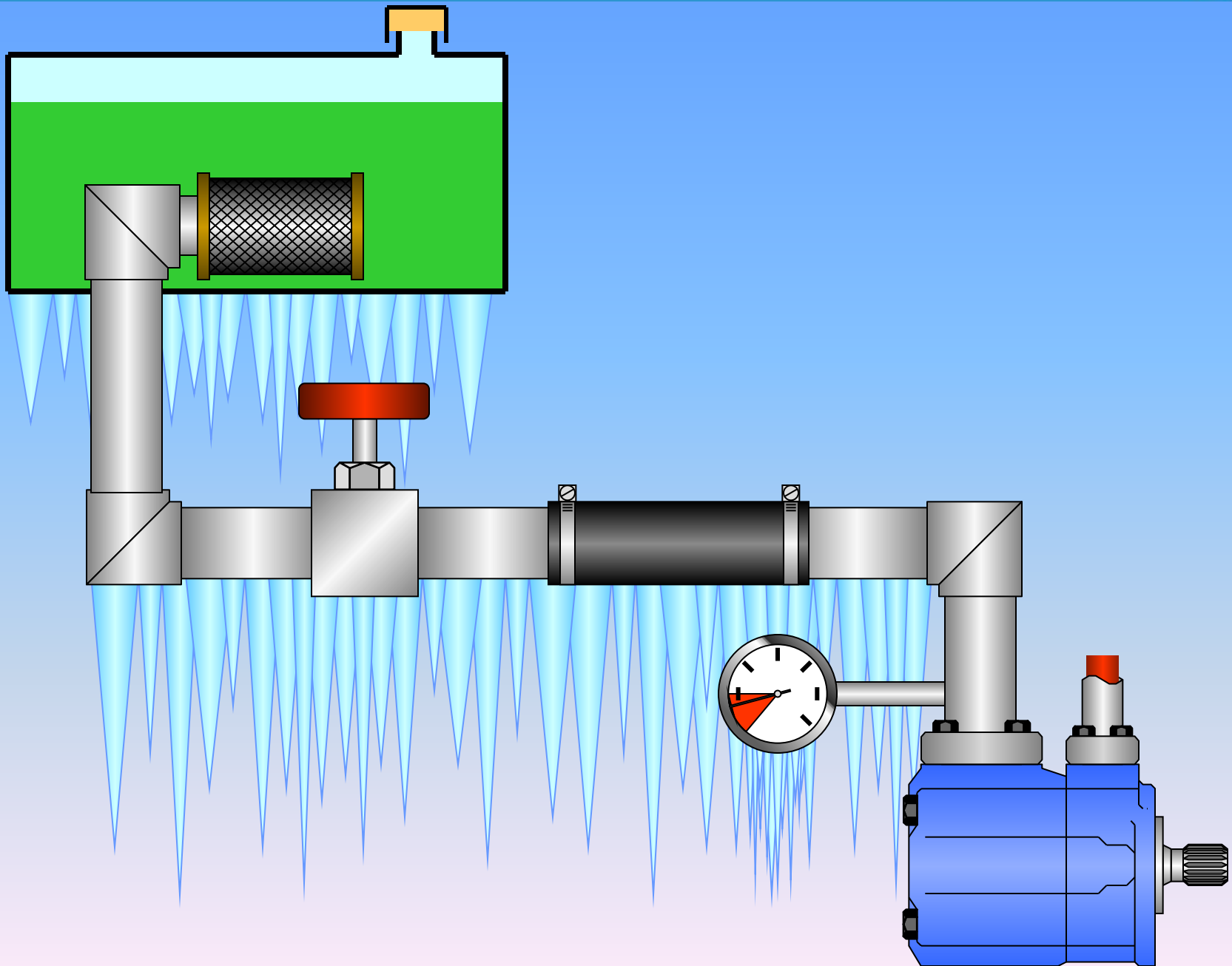


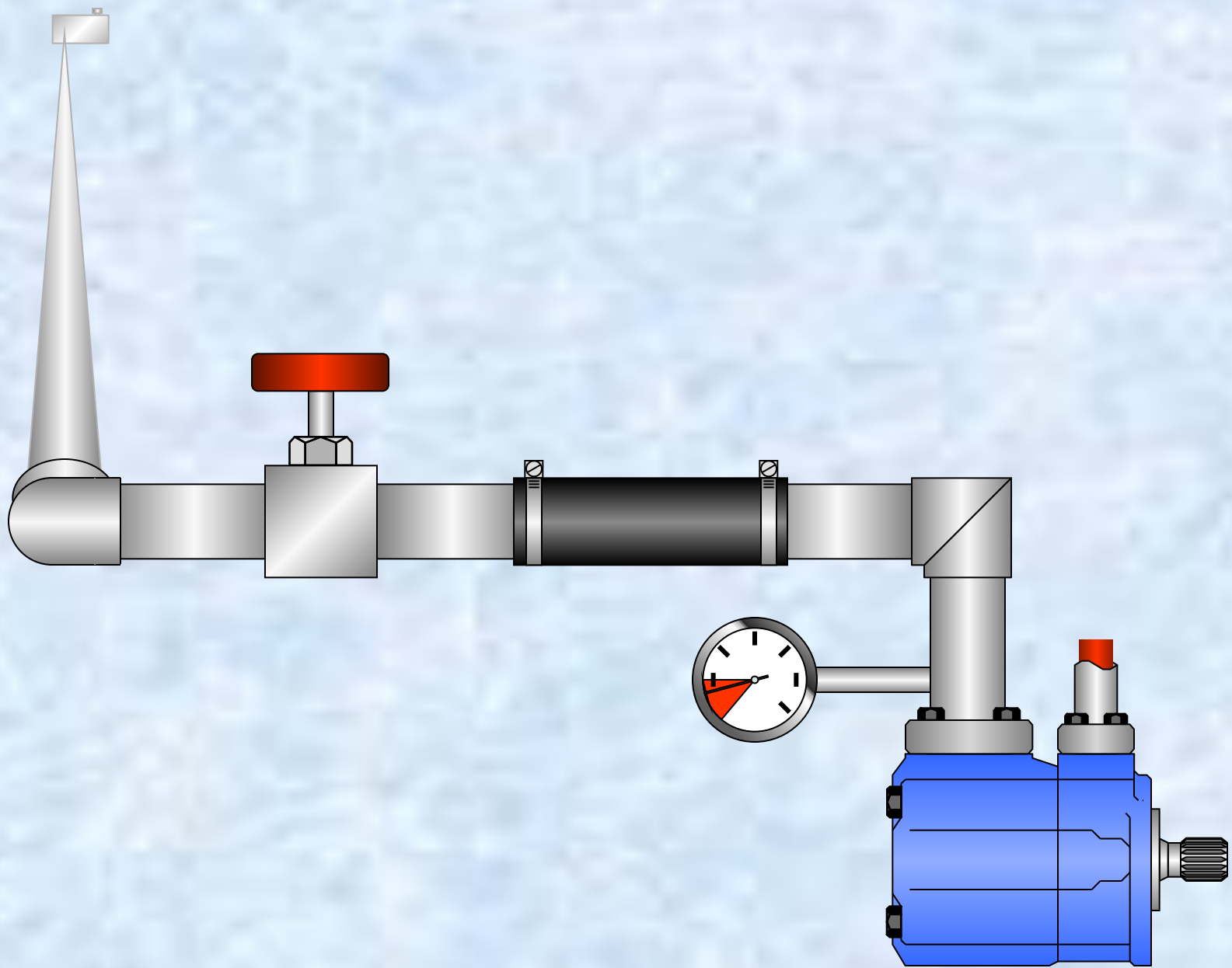
# Возникновение кавитации – закрыт перепускной клапан

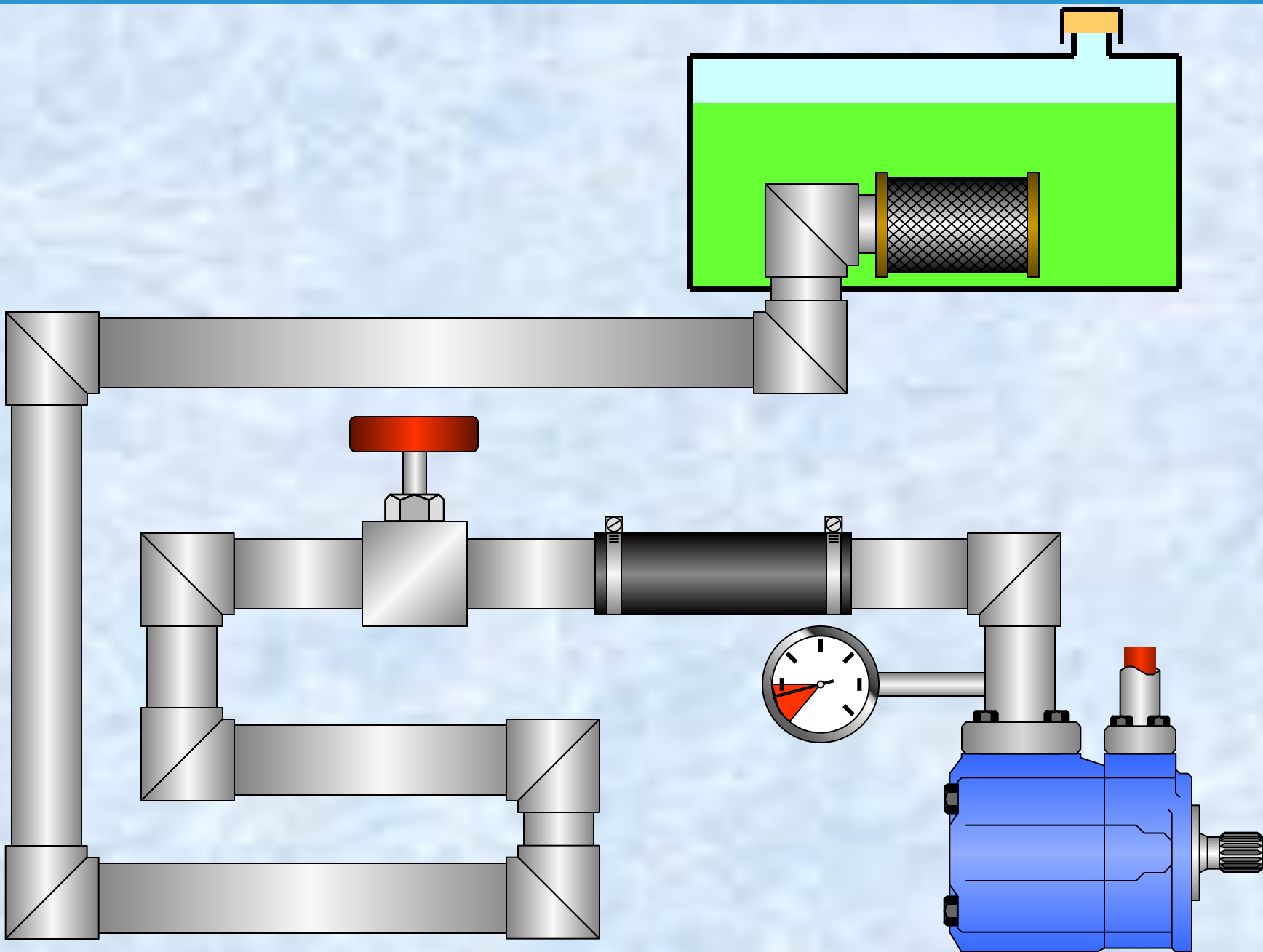




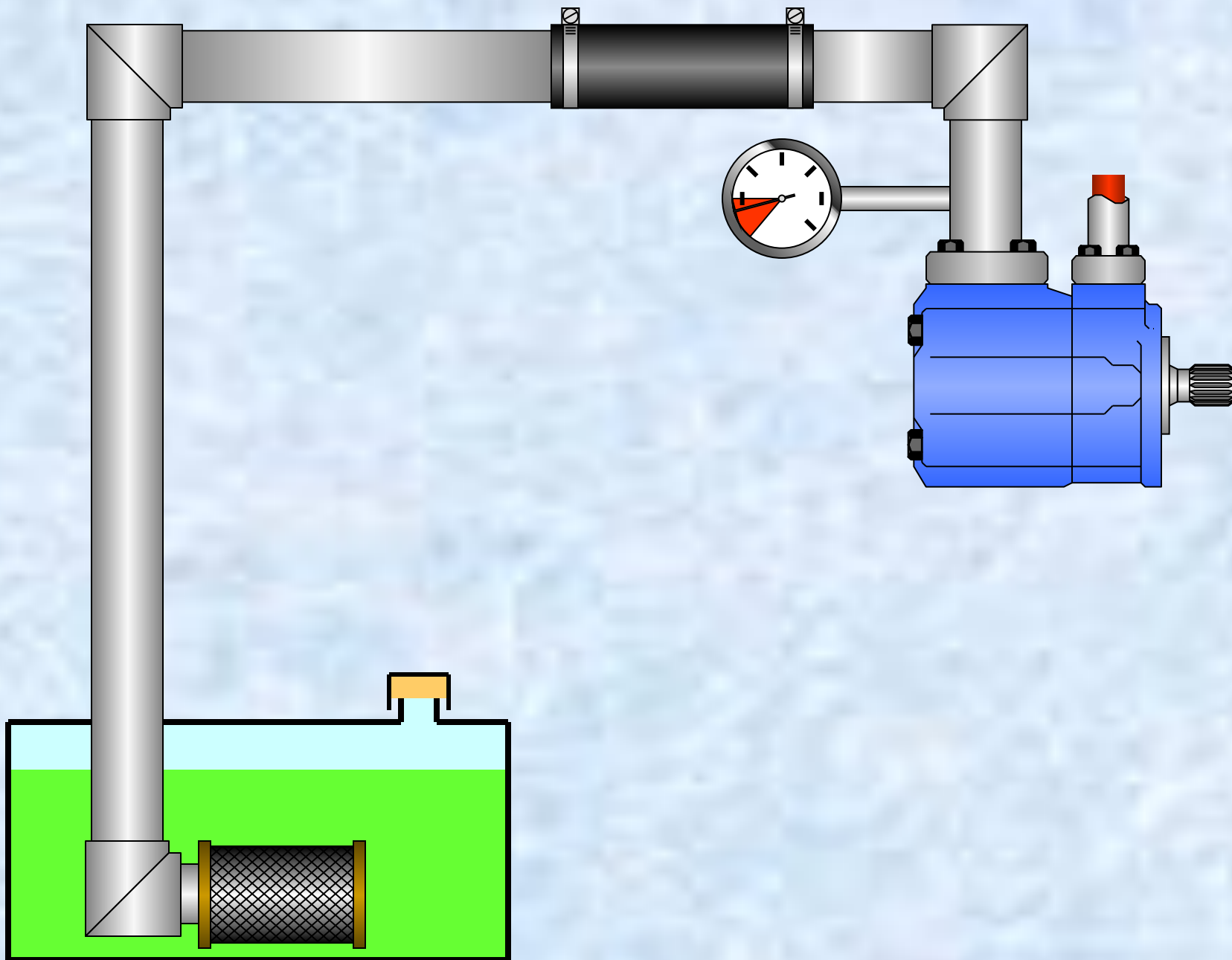


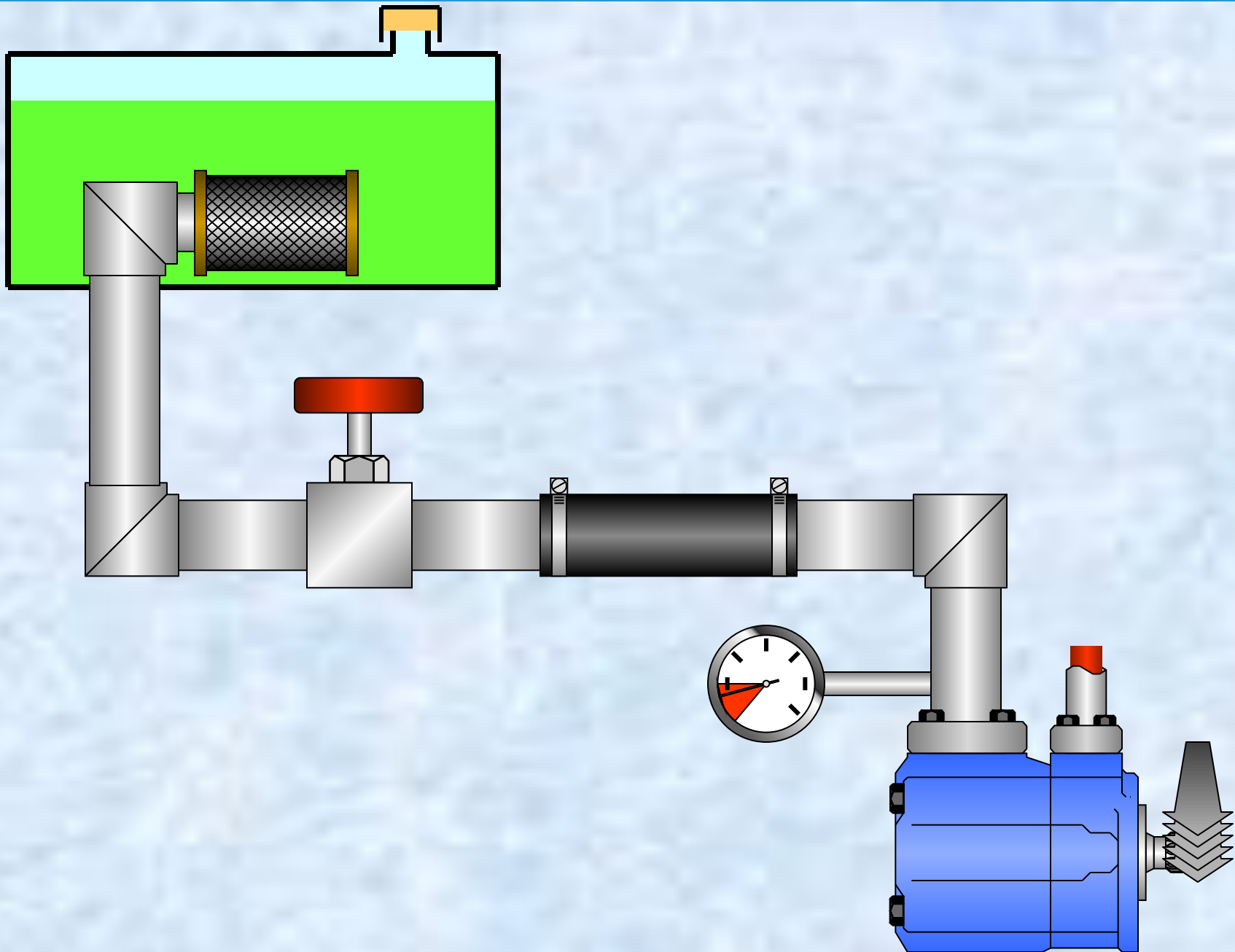


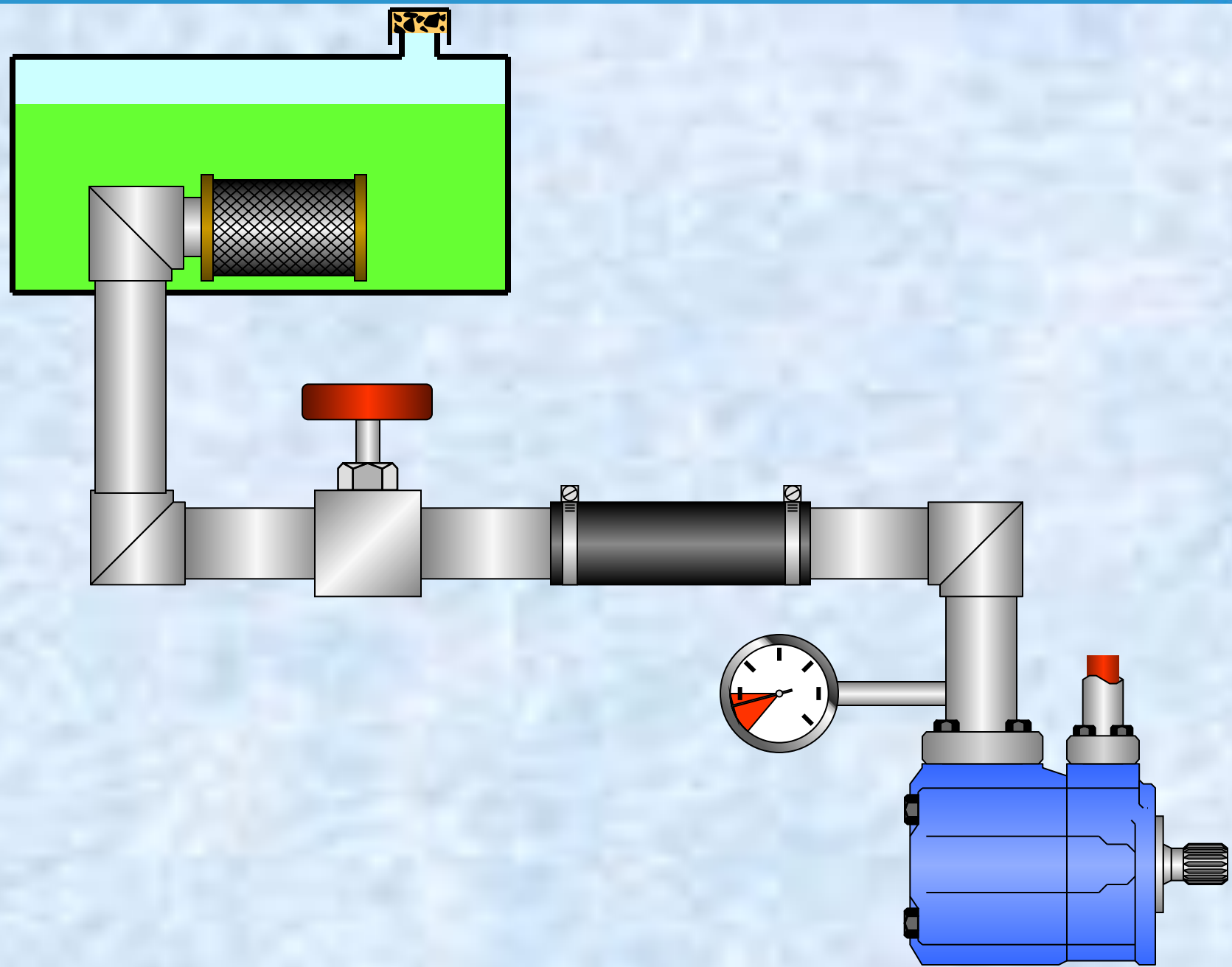


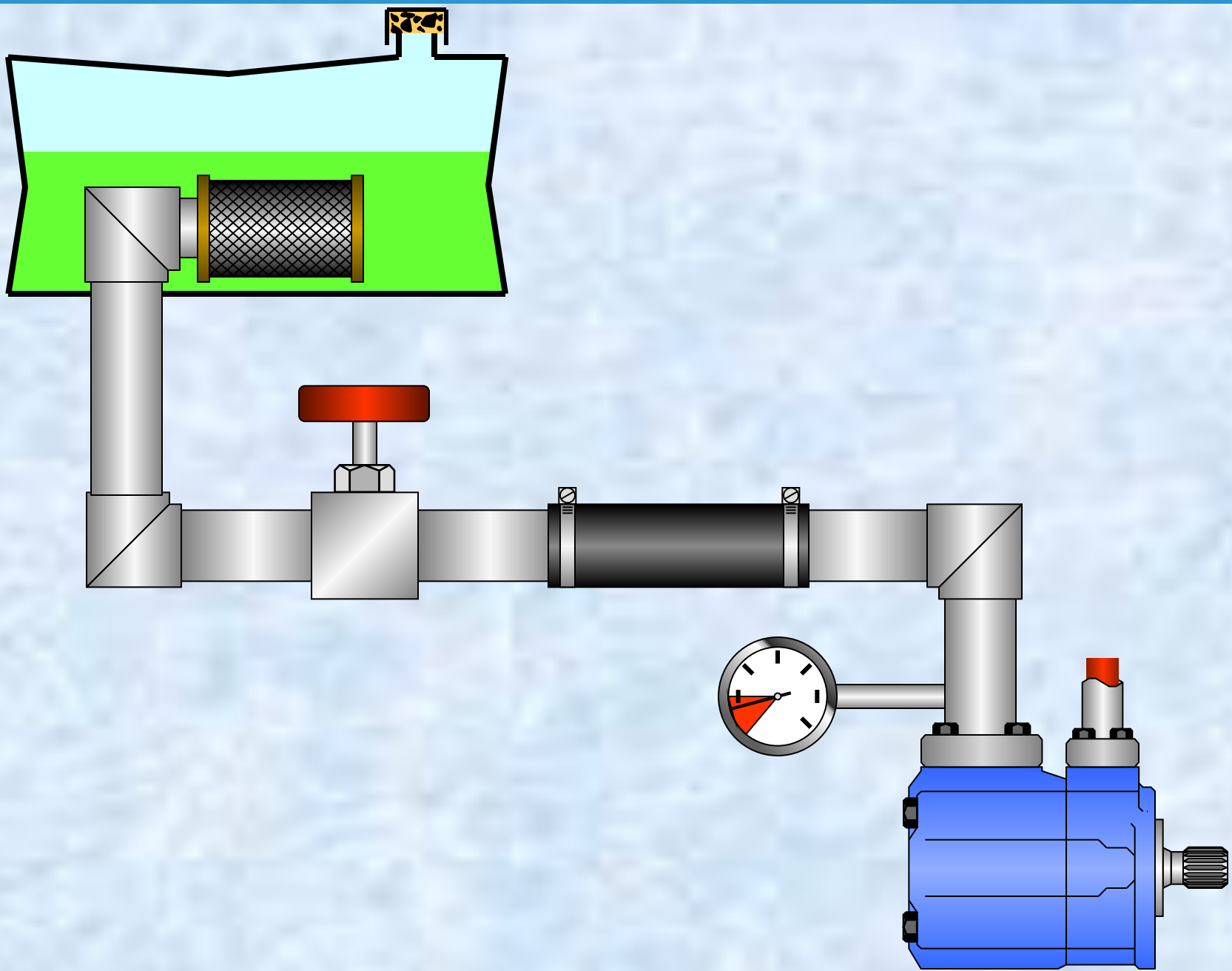


# Возникновение кавитации – повышенная высота всасывания

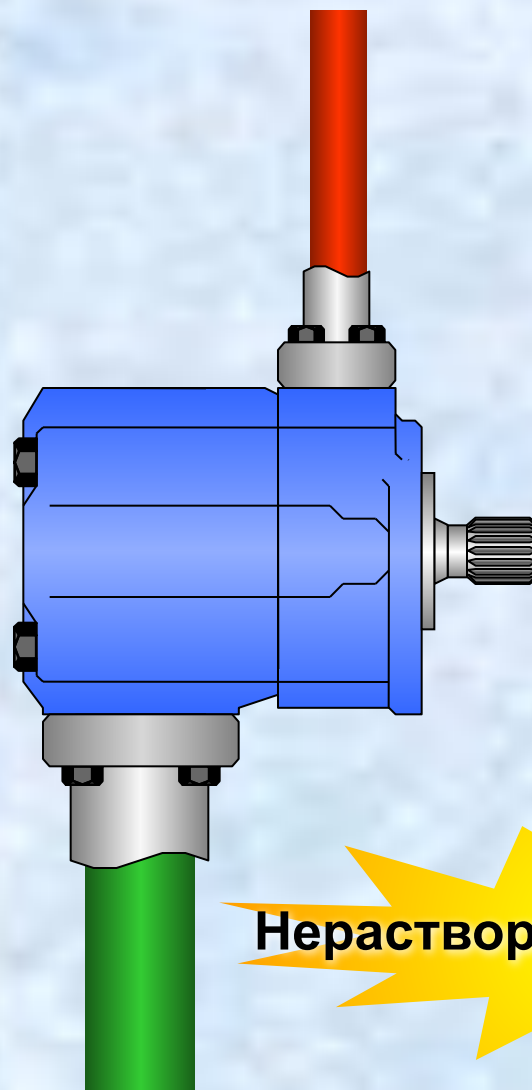




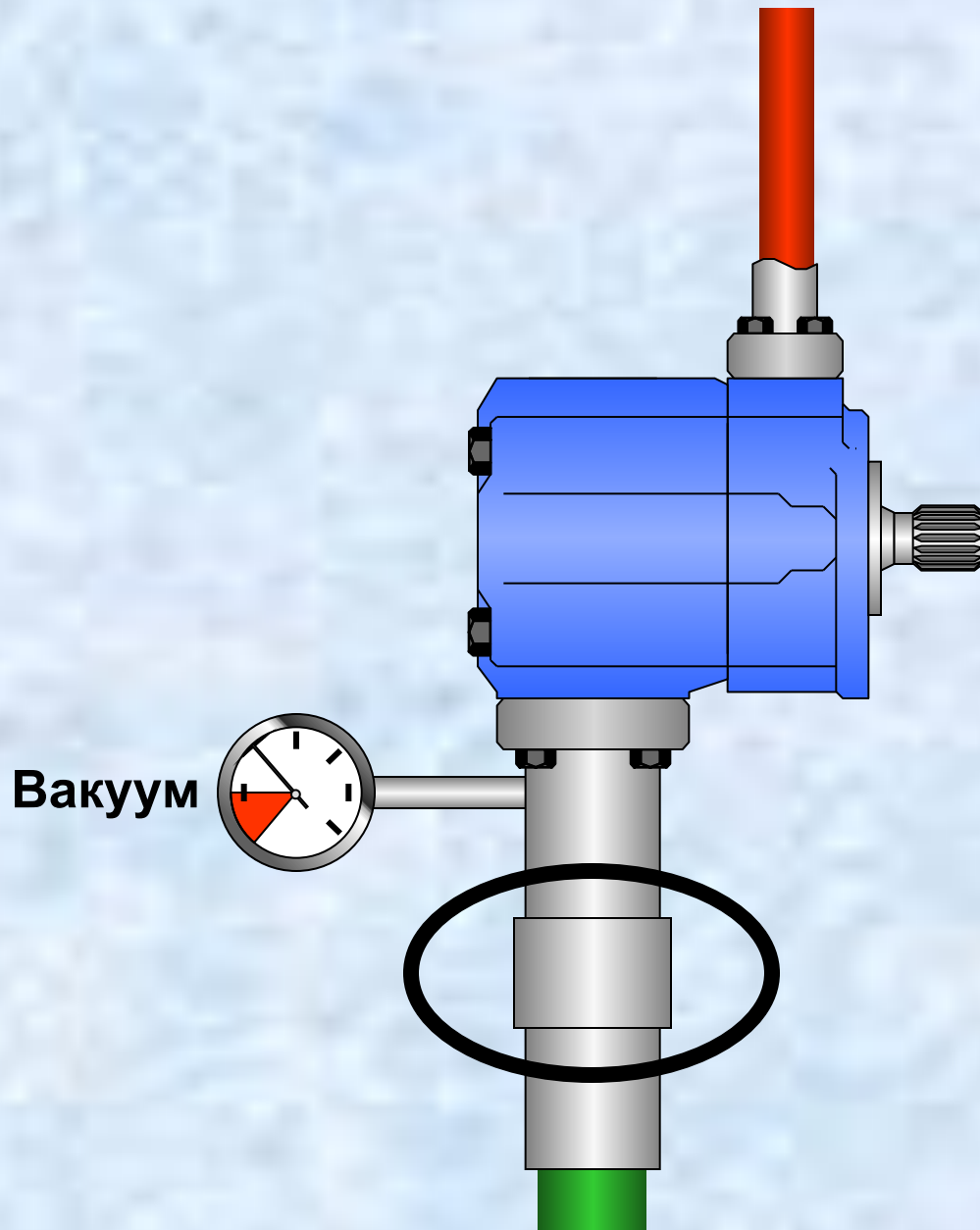


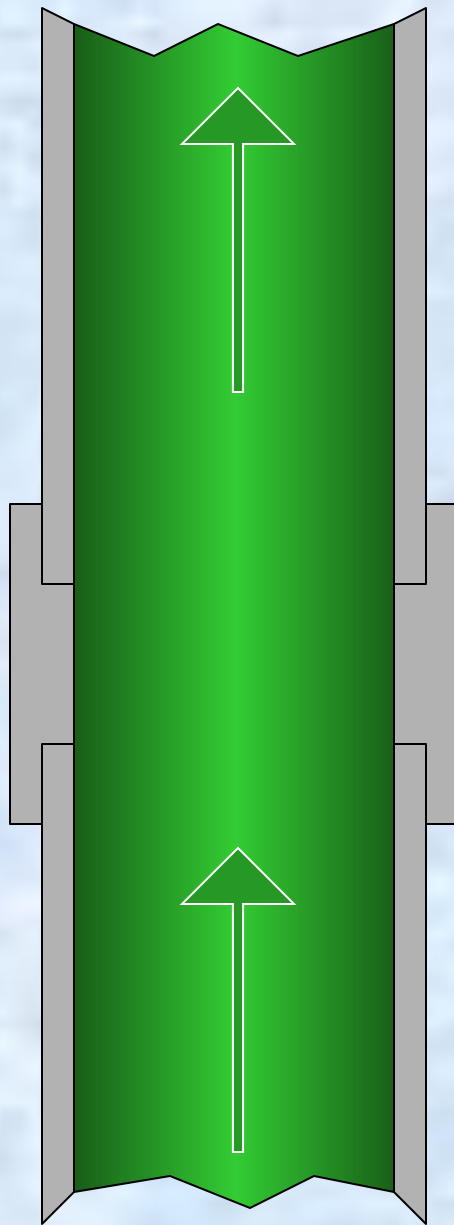




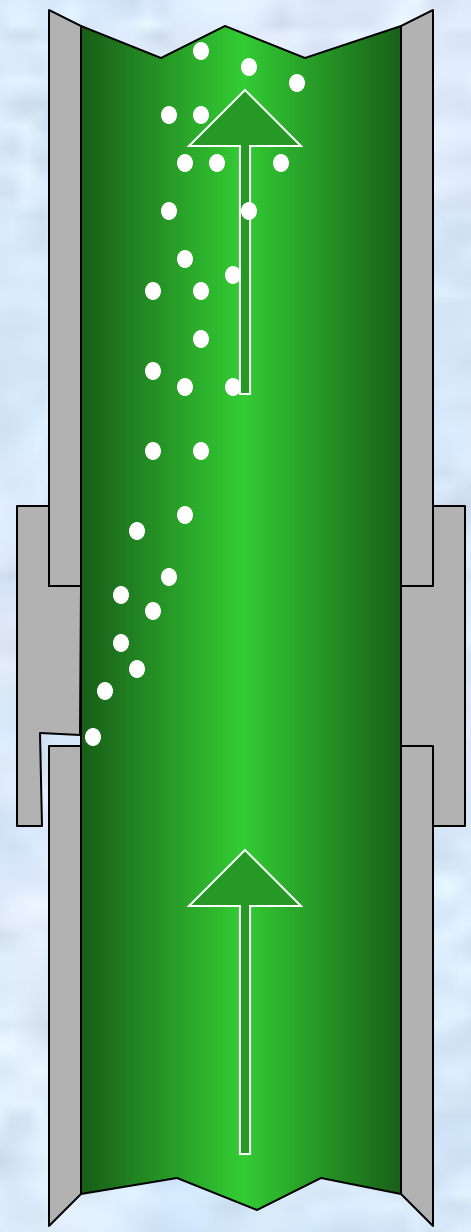


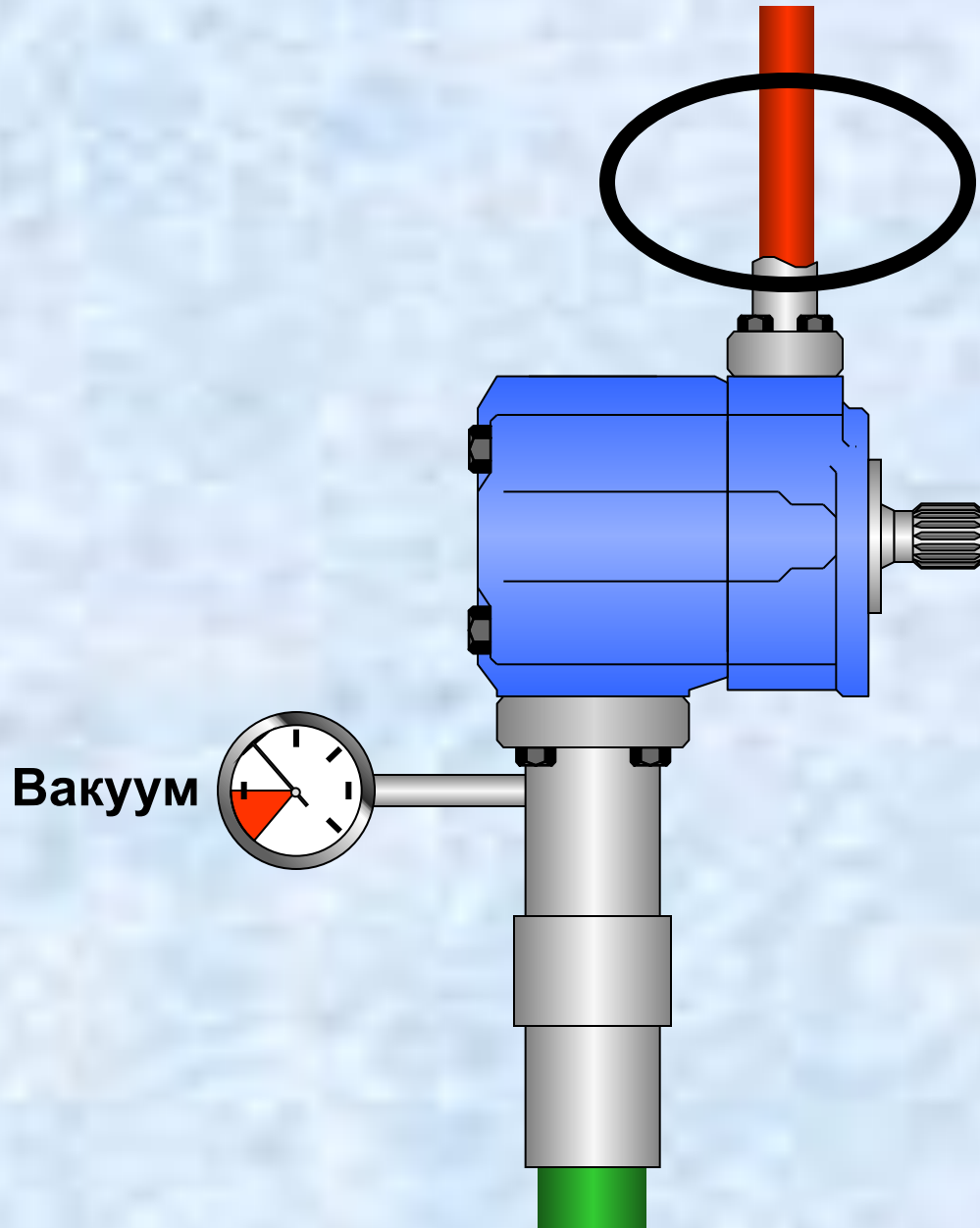
**Нерастворенный воздух**

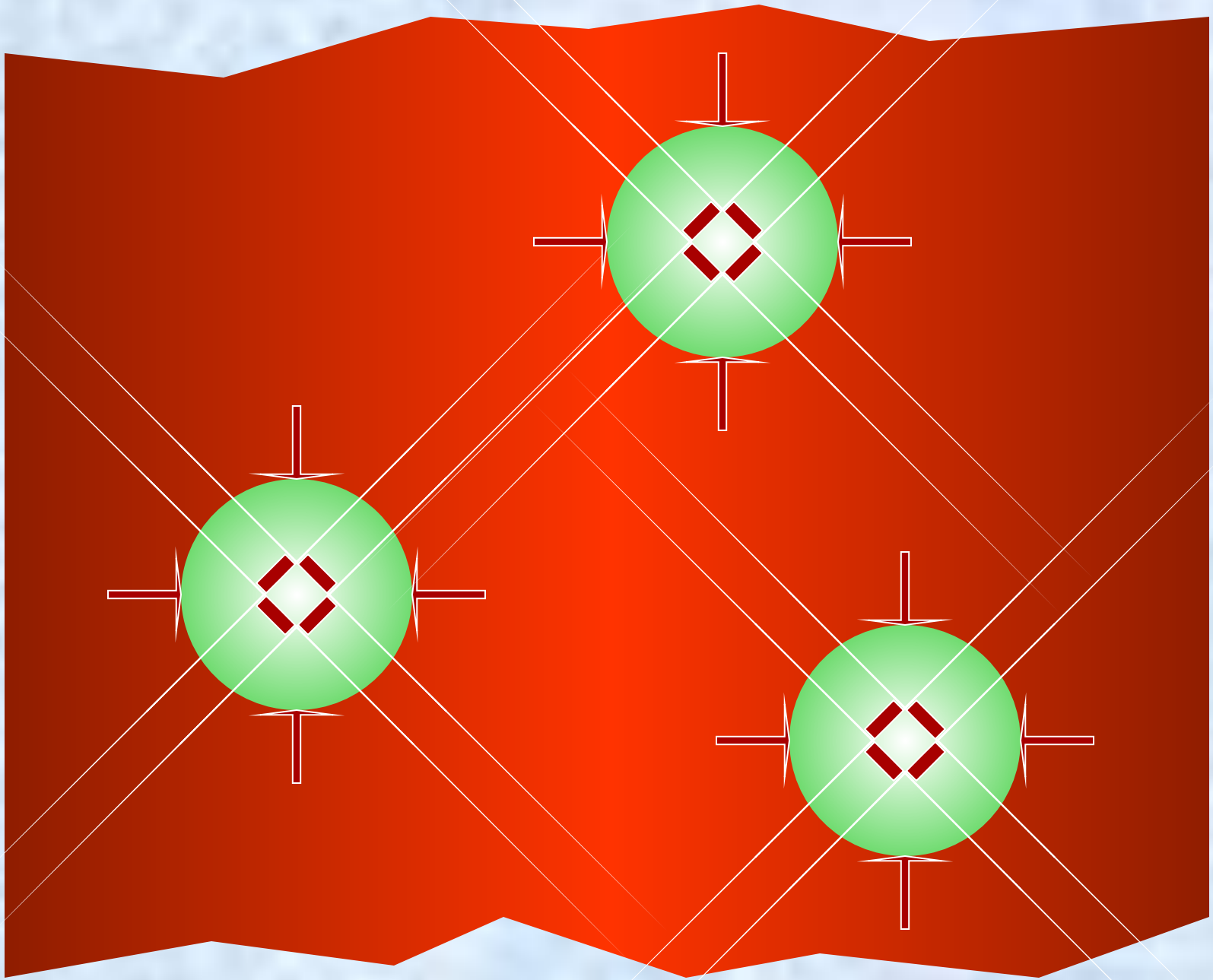


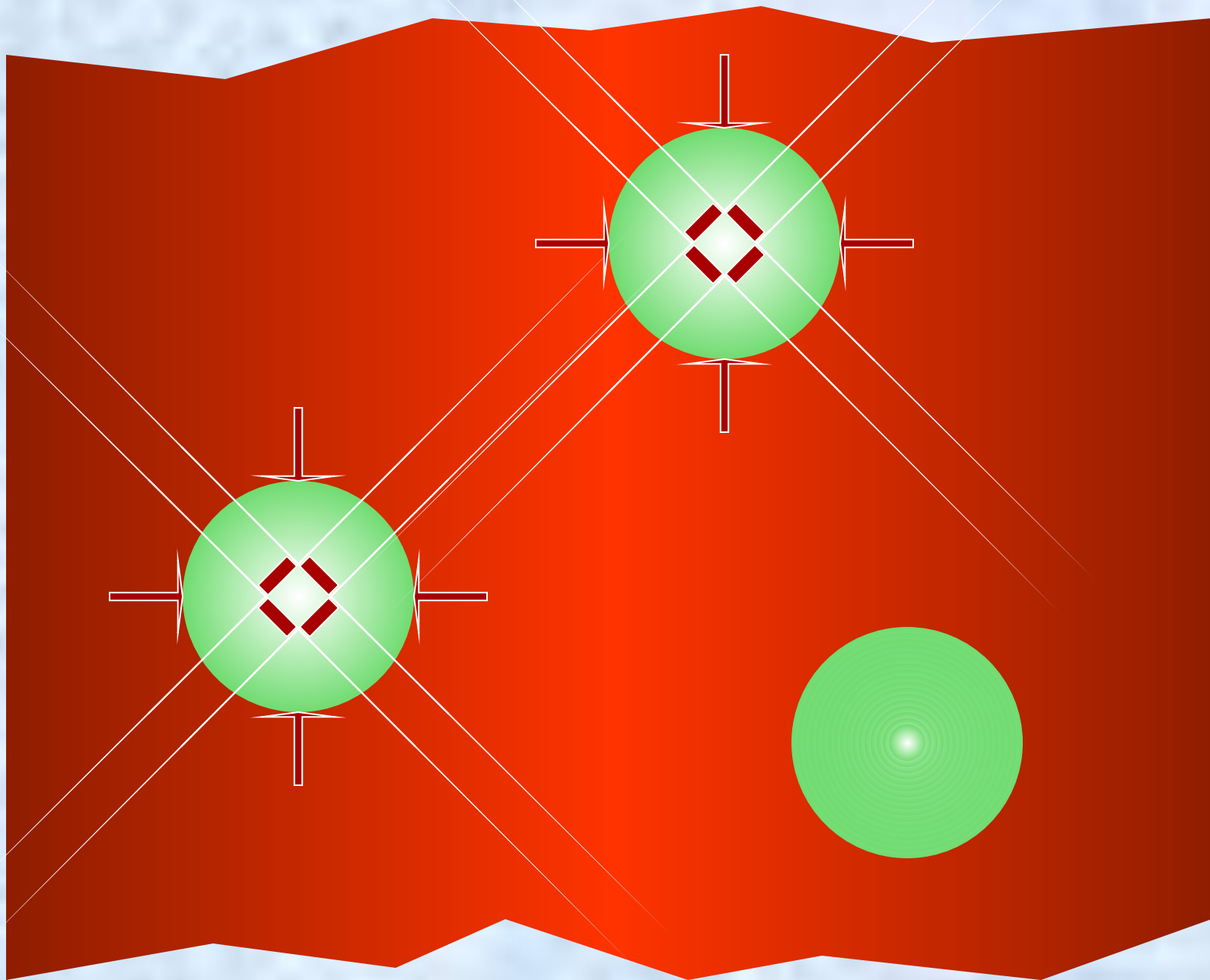




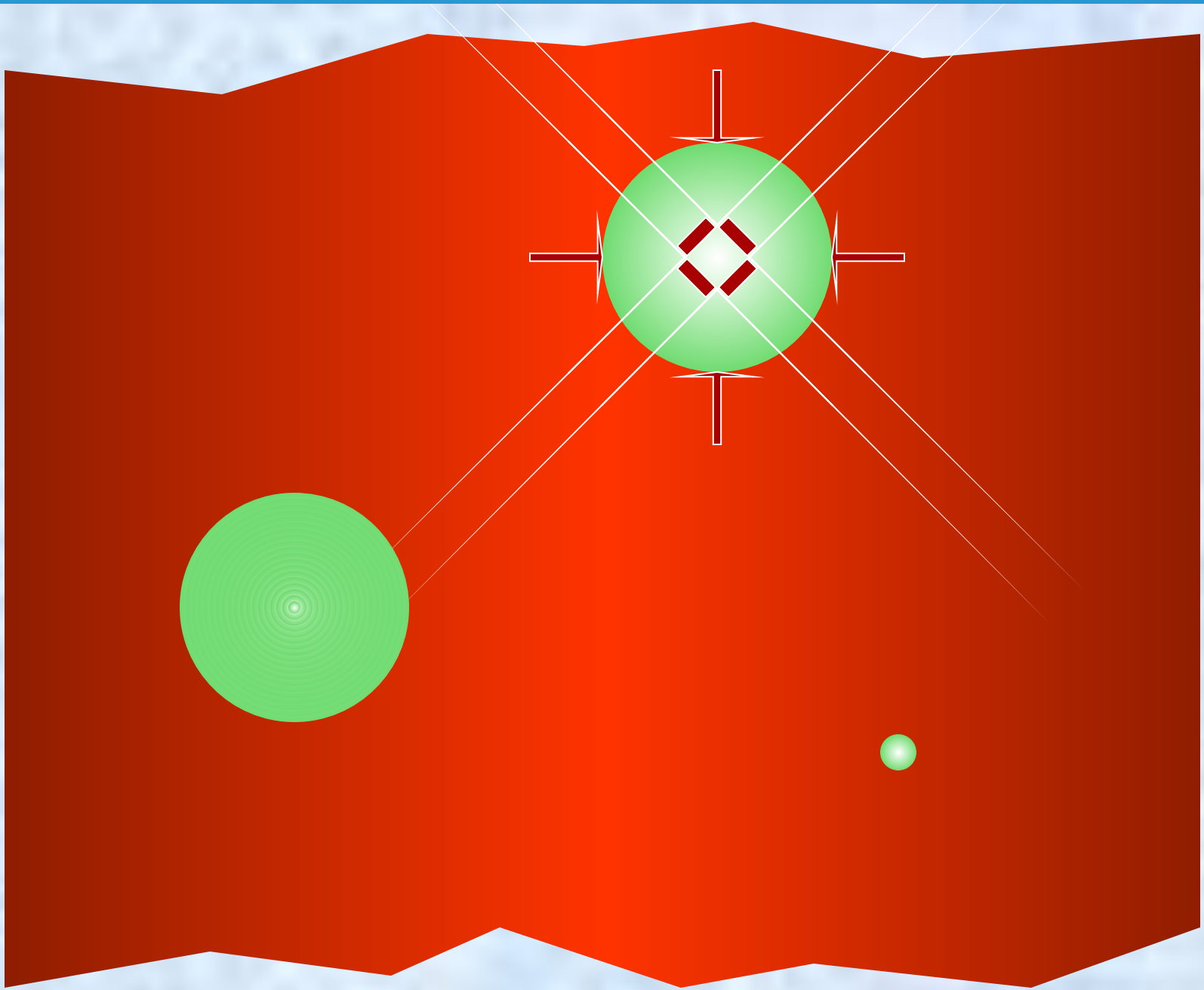


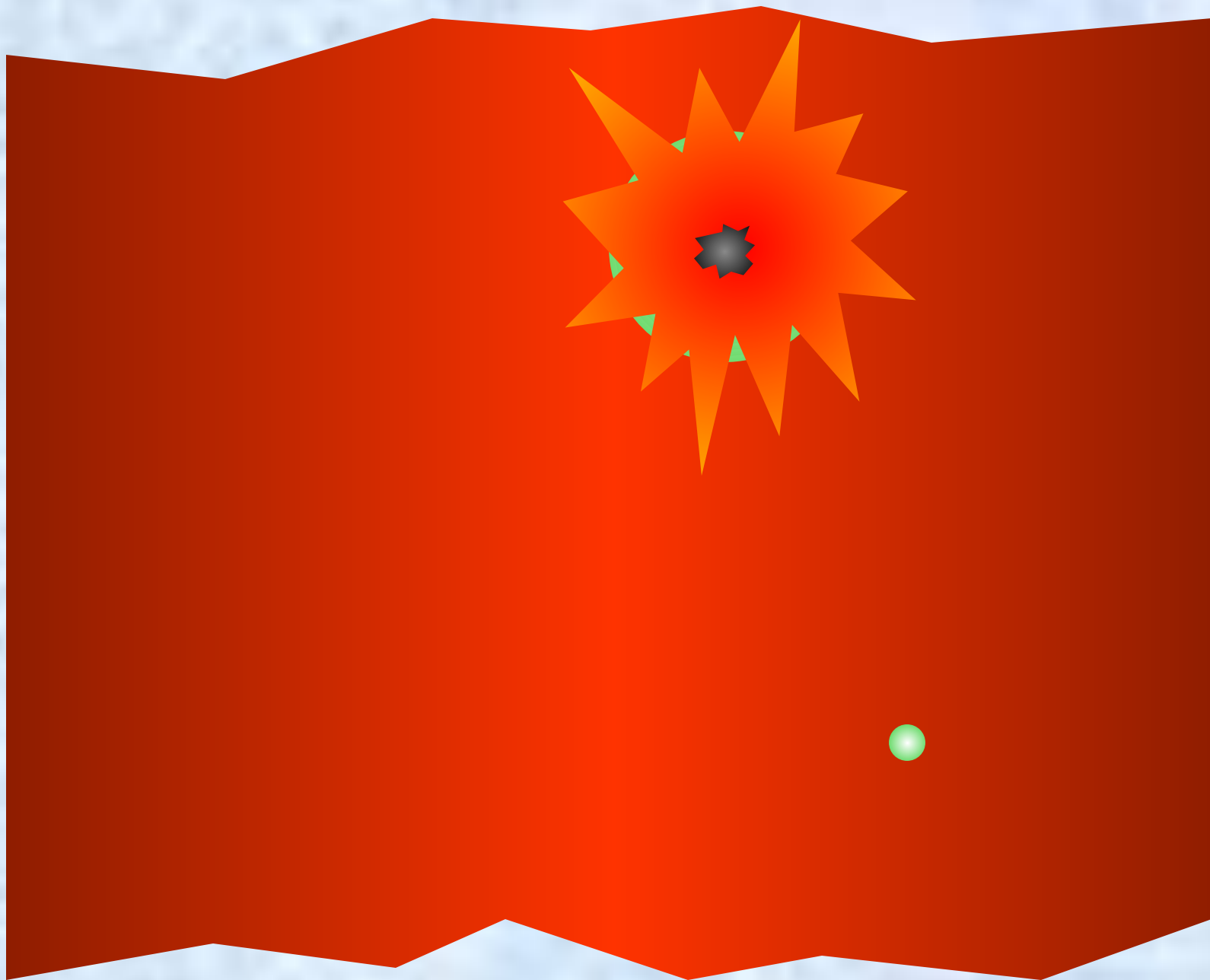




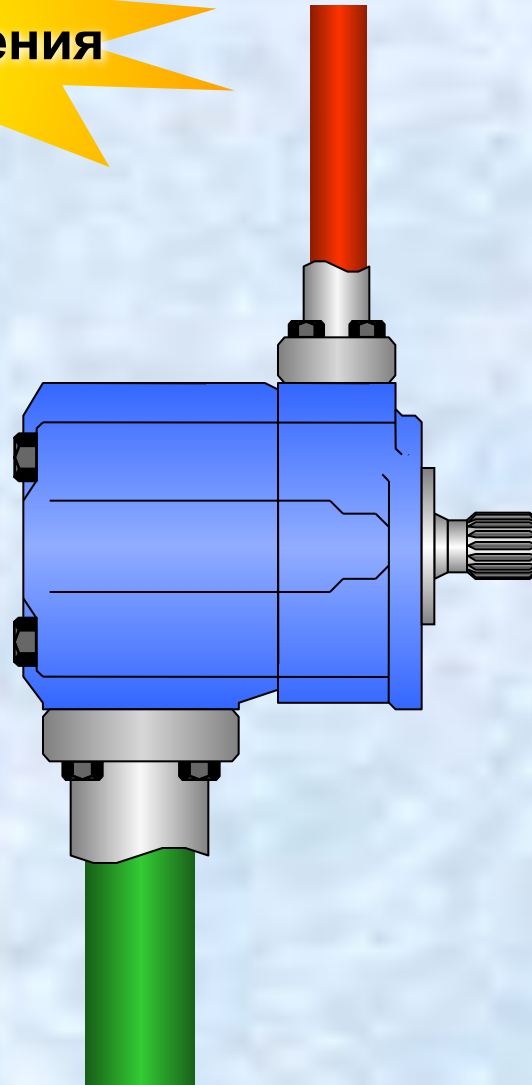


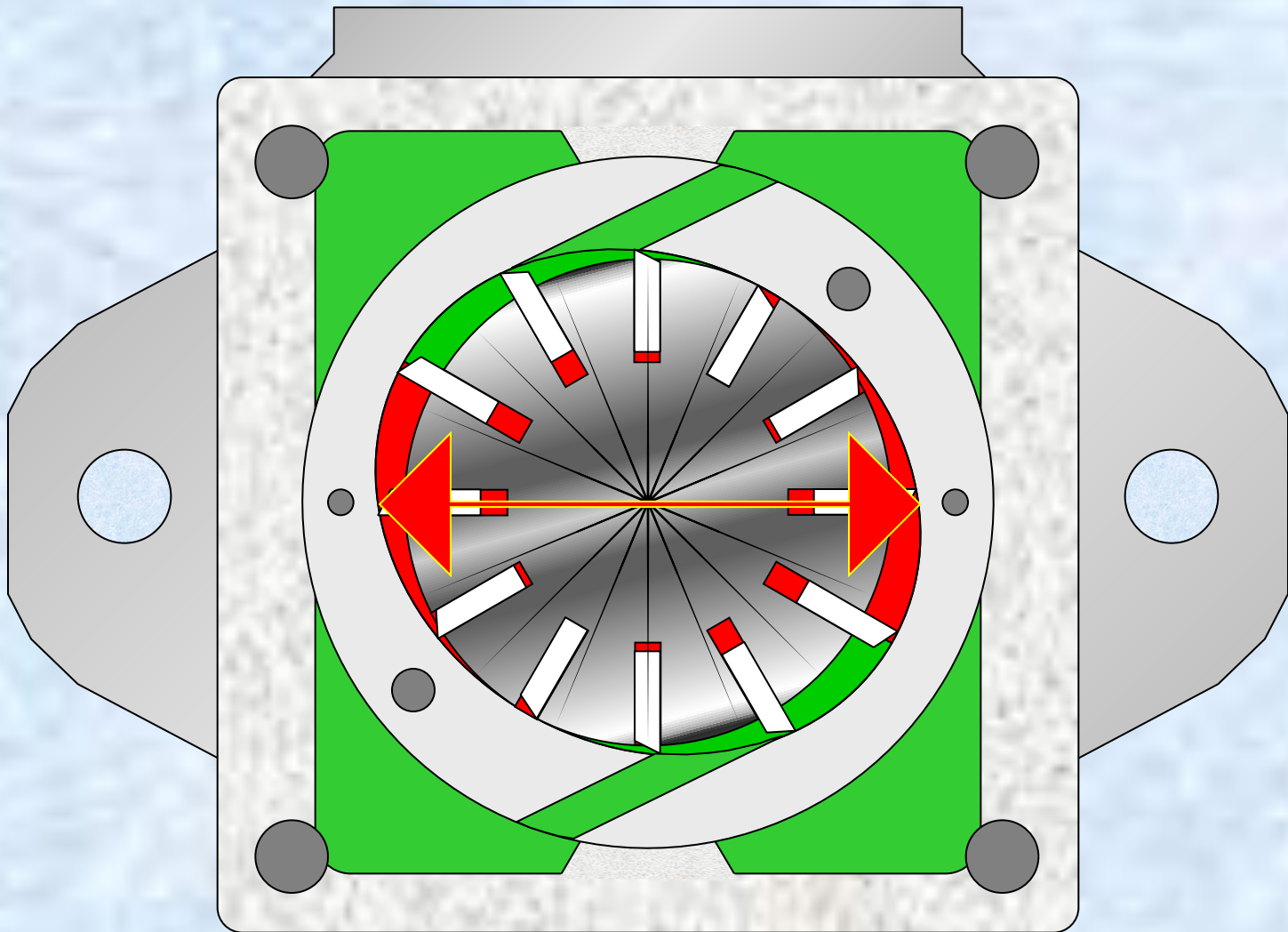


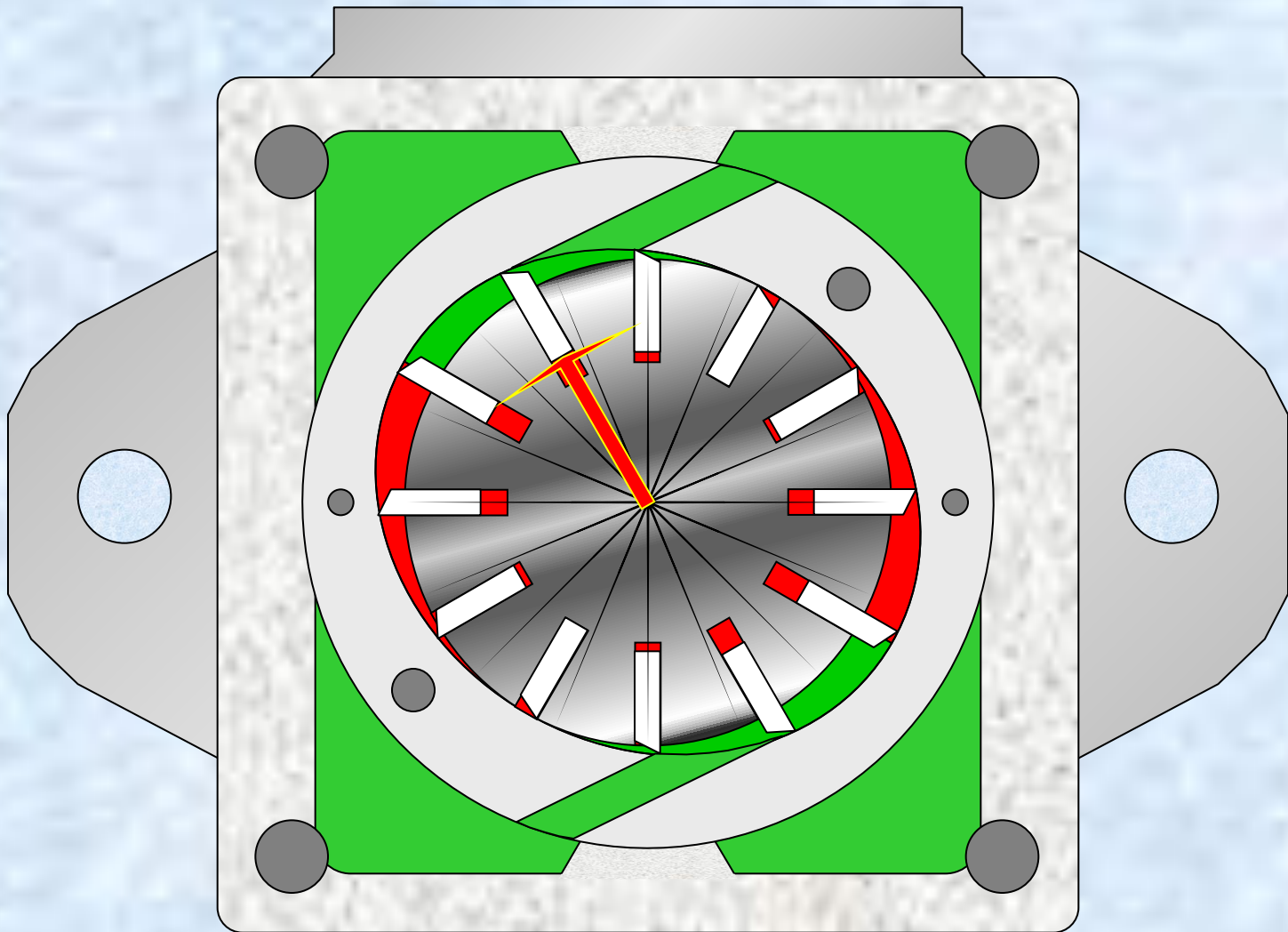




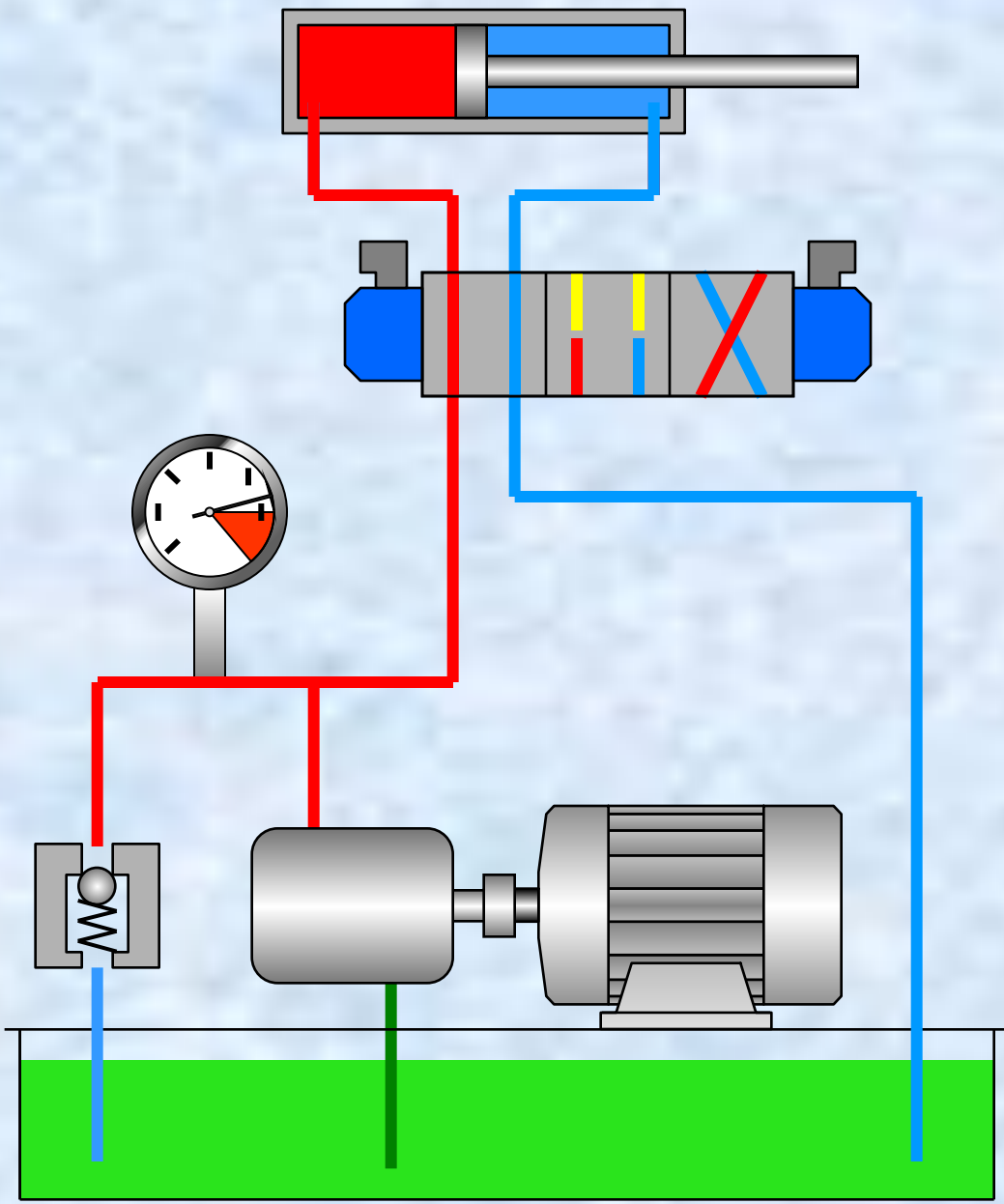
**Пульсации давления**



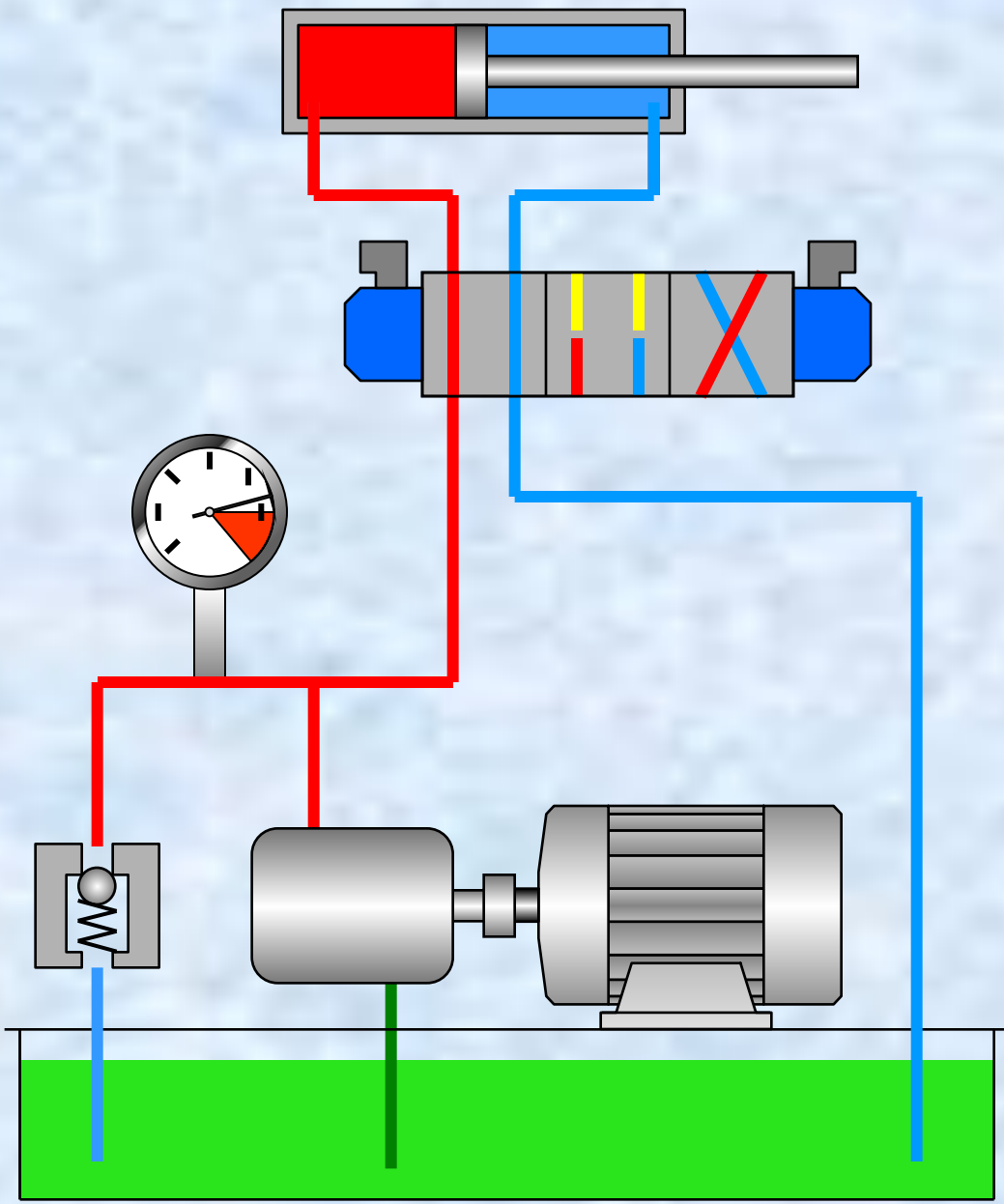




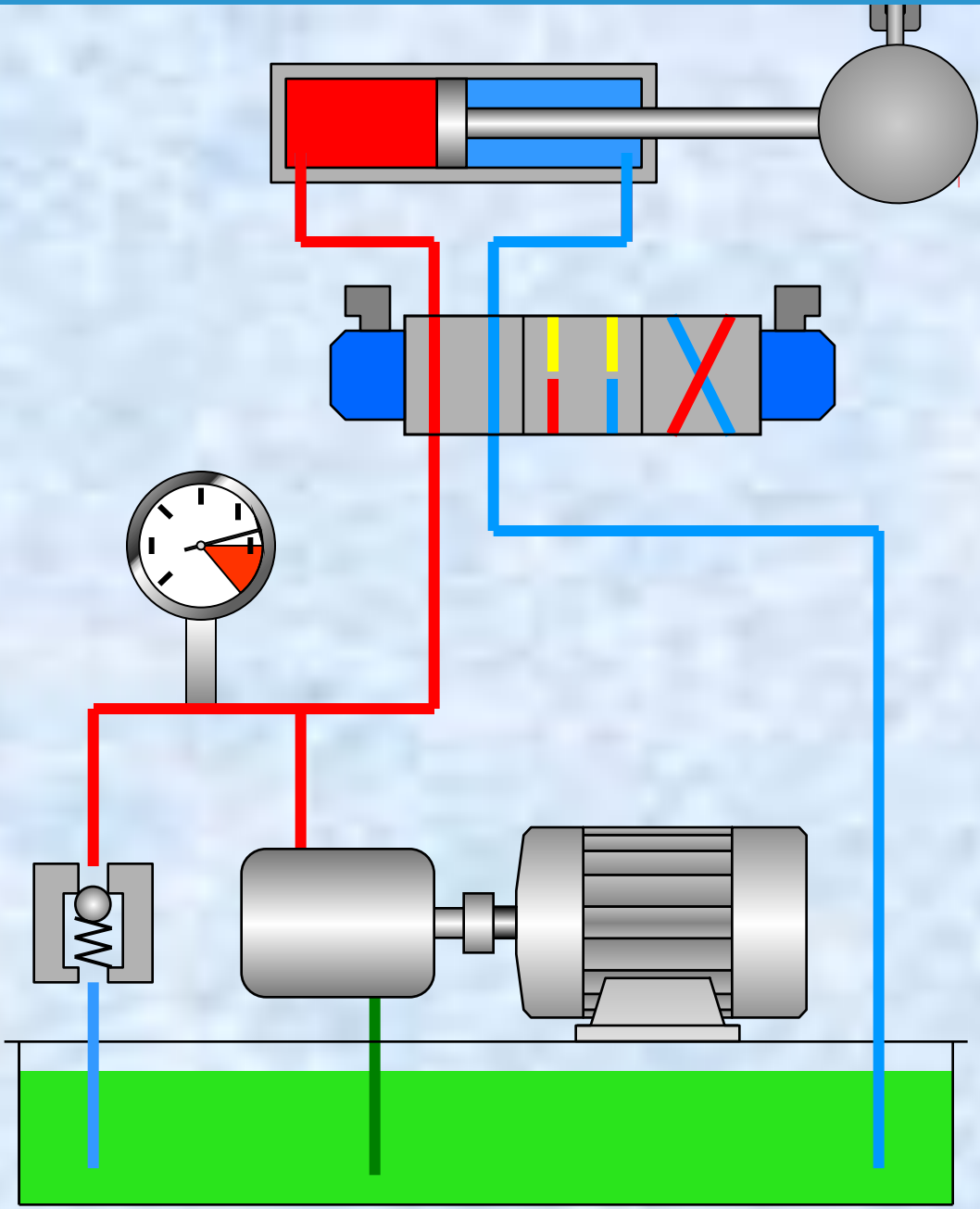
# Возникновение перепадов давления от ударных нагрузок



# Возникновение перепадов давления от ударных нагрузок

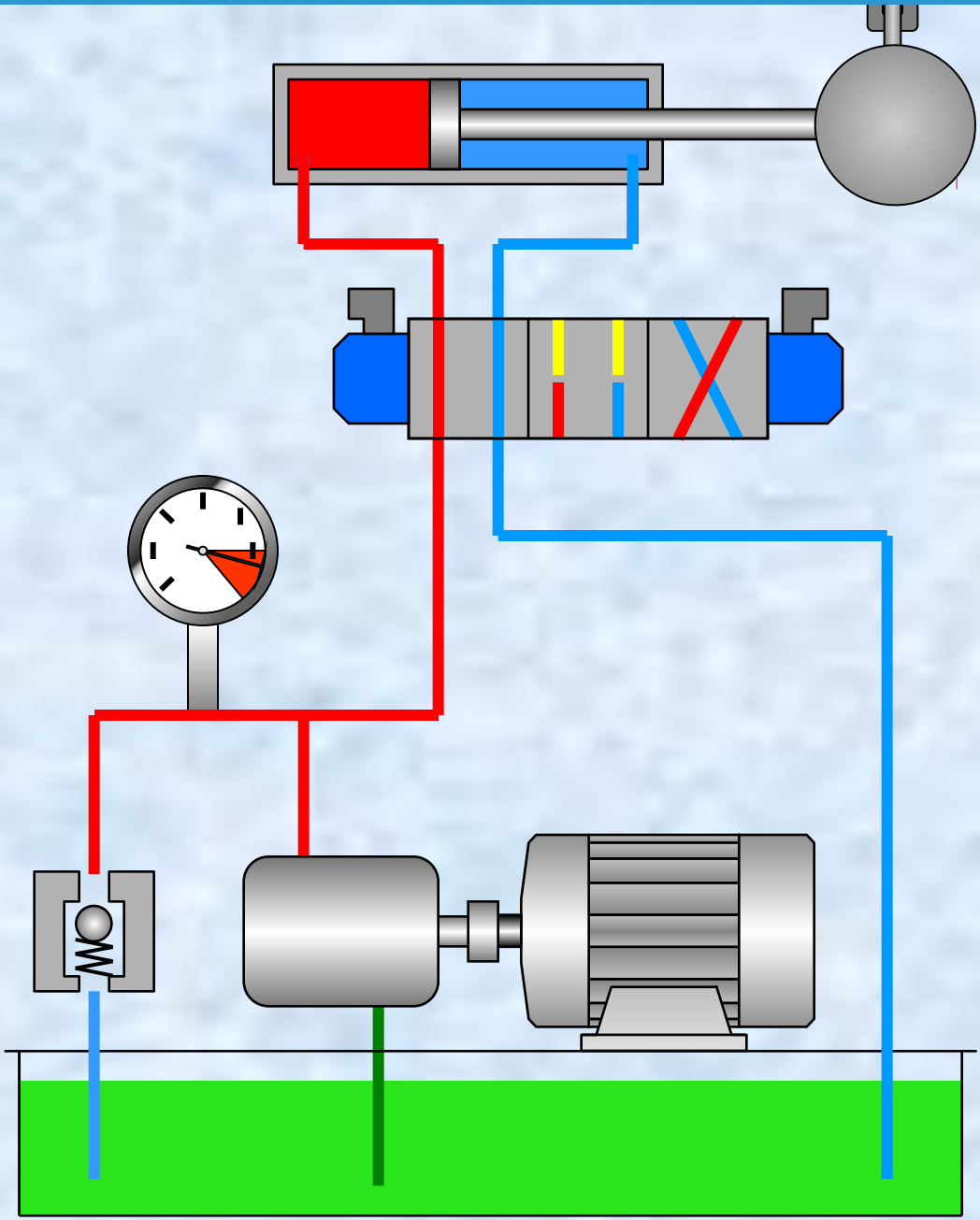


# Возникновение перепадов давления от ударных нагрузок

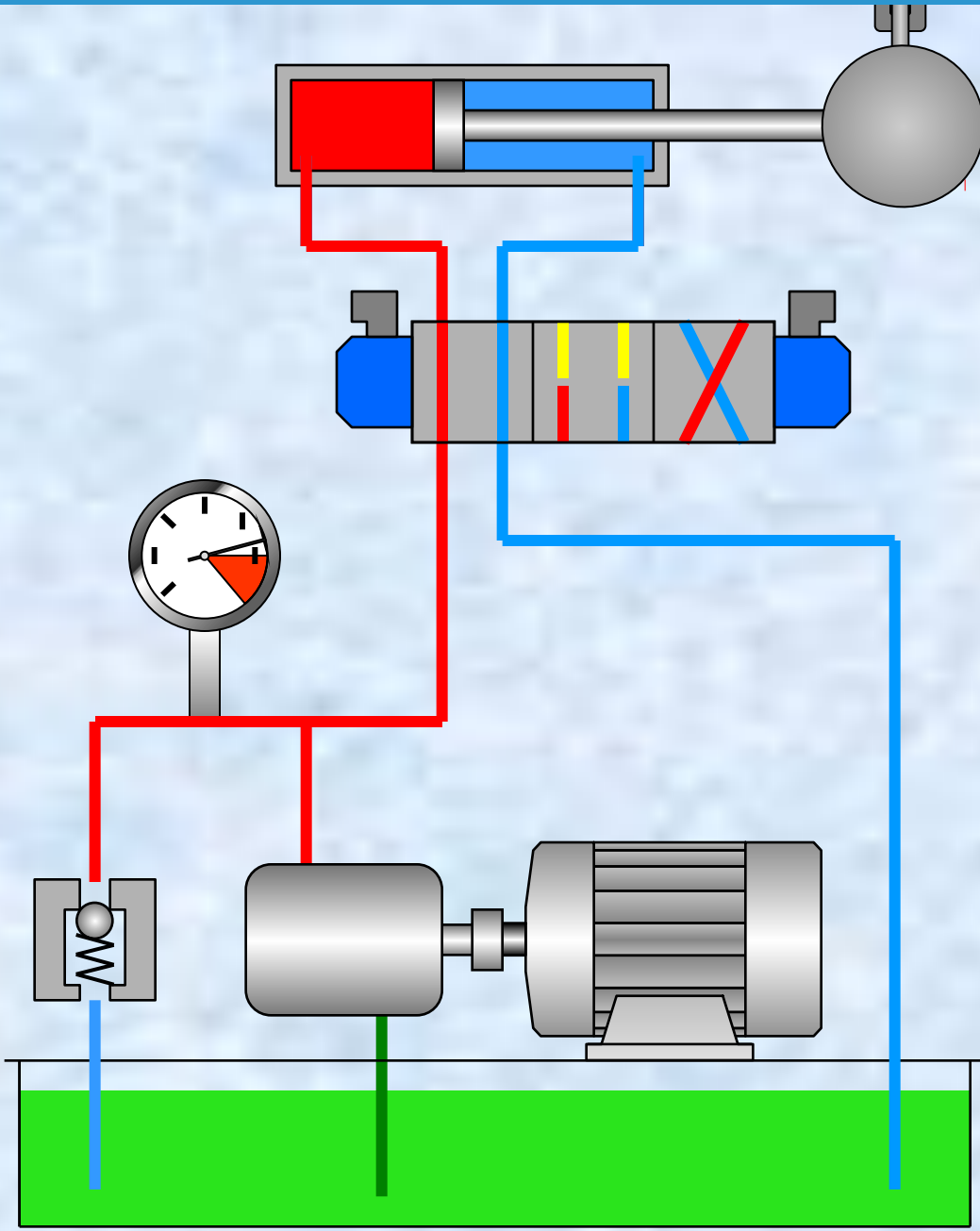


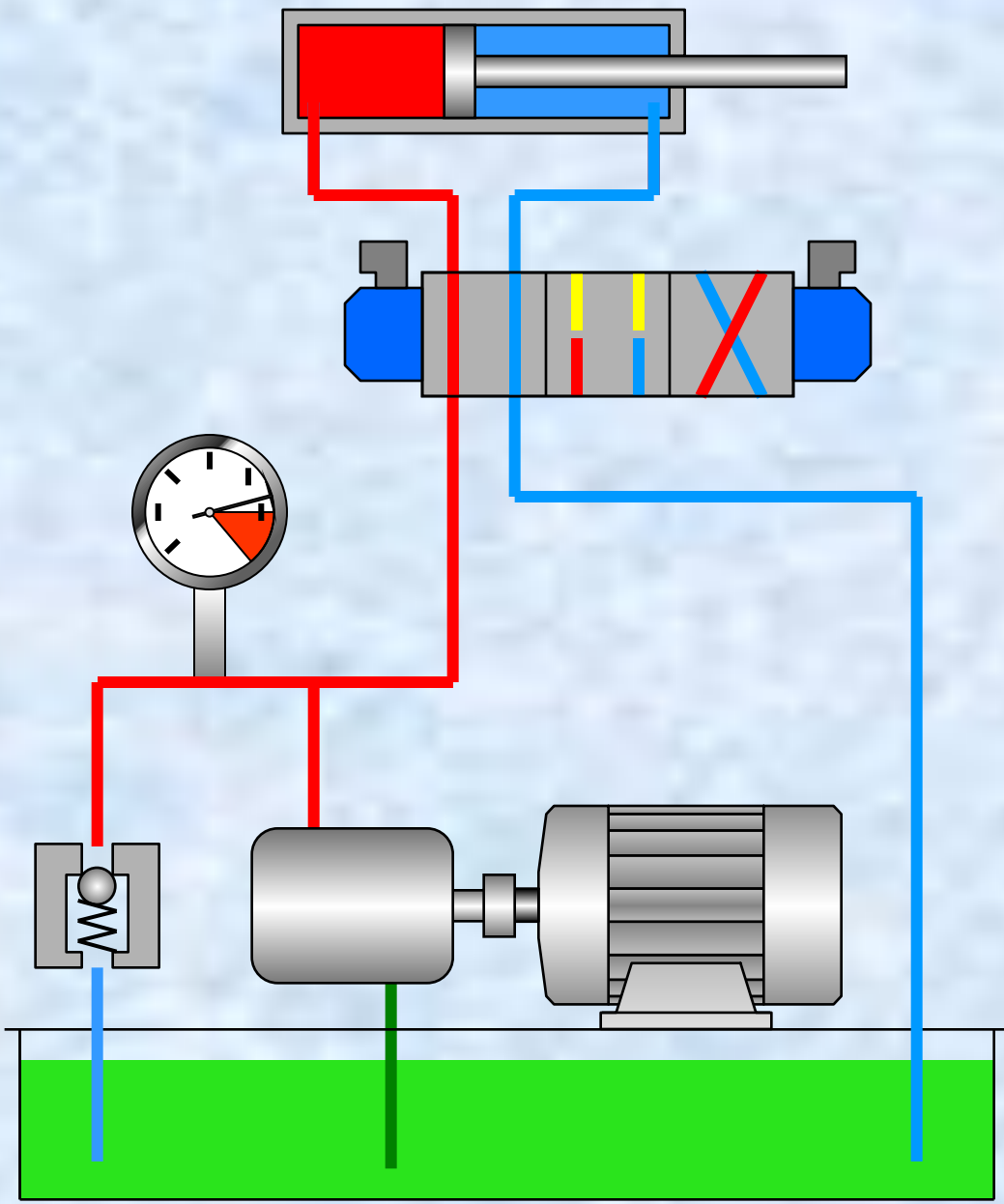


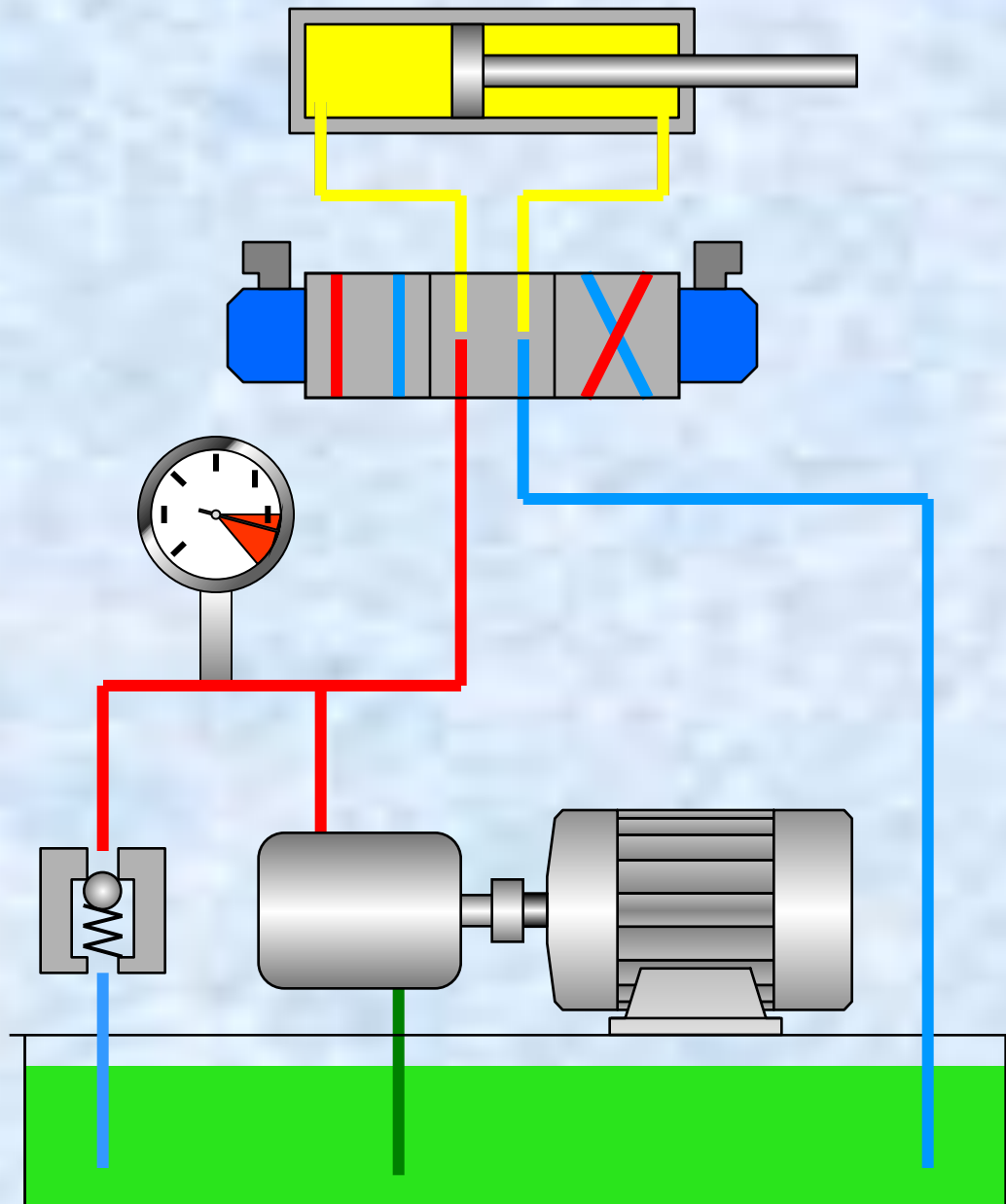
# Возникновение перепадов давления от ударных нагрузок



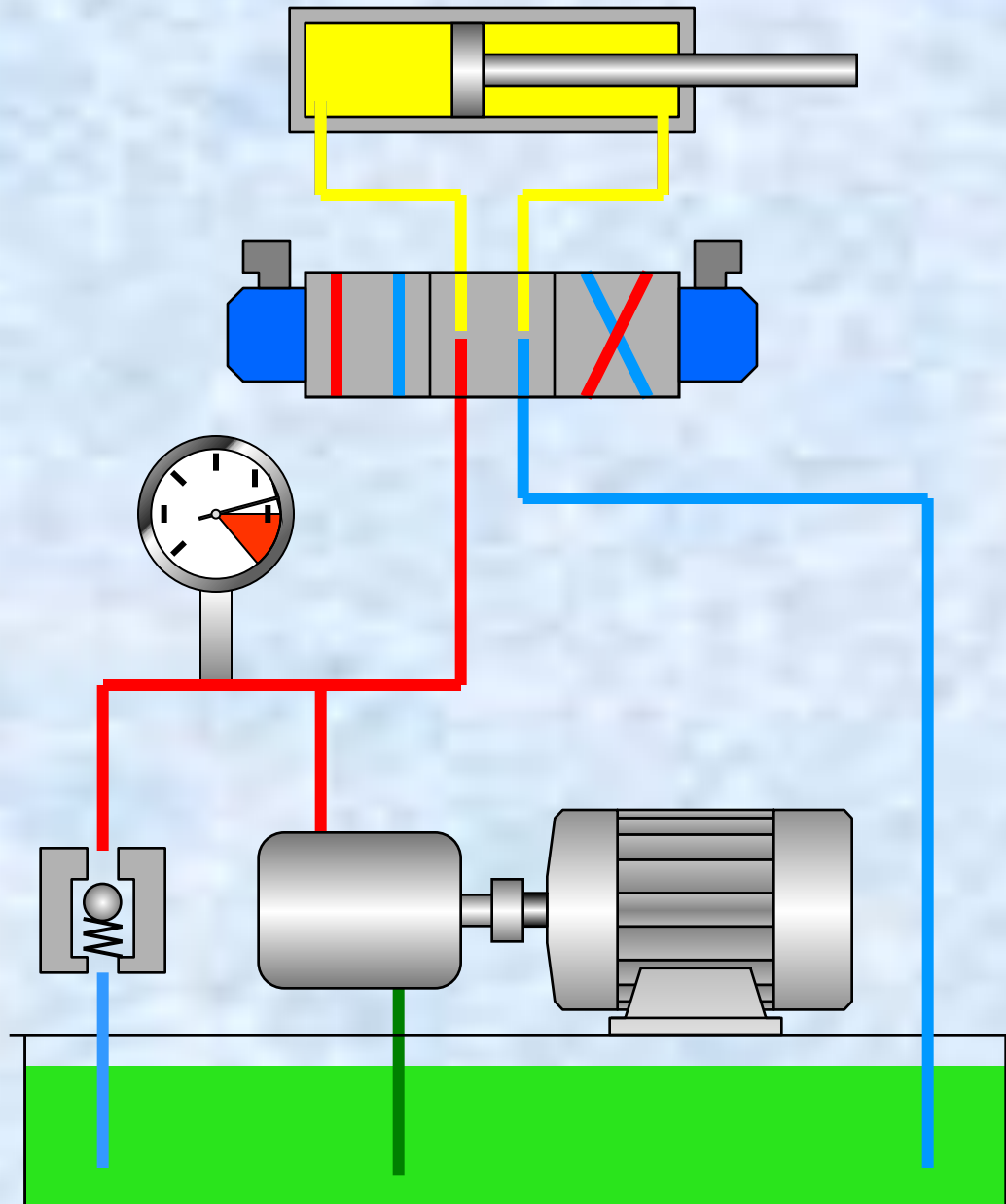
# Возникновение перепадов давления от ударных нагрузок







## Ventilansprechzeiten





Steve Skinner, Eaton Hydraulics, Havant, UK

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